## VETERINARY STUDENTS' PREFERENCES FOR RESPONDING TO CLIENTS WHO ARE HAVING A DIFFICULT TIME COPING WITH THE ILLNESS, TREATMENT, OR DEATH OF A COMPANION ANIMAL



CAROLE JOY DIAS

A DISSERTATION PRESENTED TO THE GRADUATE SCHOOL
OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

Copyright 2002

by

Carole Joy Dias

In loving memory of my mother,
Dolores Mechling Salsgiver,
who taught me the importance of happiness
and encouraged me to follow my dreams.

### ACKNOWLEDGMENTS

I would like to express my sincere gratitude to the very special people who helped in various ways with this dissertation. Dr. Larry Loesch reviewed and edited the manuscript and offered invaluable guidance and feedback. His time, generosity, support, and sense of humor are greatly appreciated. I am extremely grateful to Dr. Leslie Fox for her interest in this study and for helping with the financing, planning, development, and data collection. Thanks also are due to my other committee members, Dr. Silvia Echevarria-Doan, Dr. Linda Shaw, and Dr. Ron Spitznagel, for their input, ideas, and recommendations for this research. I am grateful to all of the participants who made this study possible by volunteering their time to complete the measurement tool, and to all of the professors who allowed time in their courses for the measurement to be given. A very special thank you goes to my best friend and life companion, Ed Dias, for his unwavering love and support, and for never losing faith in me. His understanding and willingness to take on extra obligations so that I would have the time and space to complete this endeavor made all of the difference in the world.

And last, a very special and warm thank you goes to all of the pets that have crossed my life and my heart for they have been my true teachers for the human-animal bond.

## TABLE OF CONTENTS

	Ī	age
ACKN	NOWLEDGMENTS	iv
ABST	RACT	. vii
СНАР	PTERS	
I	INTRODUCTION	1
П	Overview Statement of the Problem Theoretical Framework Need for the Study Purpose of the Study Hypotheses Overview of the Remainder of the Study REVIEW OF THE RELATED LITERATURE.	. 12 . 15 . 18 . 19 . 19
	Characteristics of Client Needs During Veterinary Consultations Veterinary Students' Preparation for Bond-Centered Practice.  Effectiveness and Use of Client/Person Centered Approaches.  Teaching Students Person-Centered Communication Skills Support for Assessment Instrument.	. 27 . 29 . 32
III	METHODOLOGY  Statement of Purpose Relevant Variables Population Sample Data Collection Procedures Instrumentation Data Analysis Mathodological Limitations	39 . 39 41 43 . 44 . 45

IV	RES	OLIS		
	Des	scriptive Data		
V	DIS	SCUSSION		
	Cor Hy Imp	nitations     70       nclusions     71       potheses     72       plications     76       commendations     80		
APPENDIX				
	A	INFORMED CONSENT FORM		
	В	STUDENT DEMOGRAPHIC INFORMATION		
	C	EXAMPLE OF SCENARIOS USED IN STUDY		
	D	GENERAL OVERVIEW TO PARTICIPANTS		
	E	INSTRUCTIONS TO PROFESSIONALS REVIEWING RESPONSES 89 $$		
	F	EXAMPLE OF SCENARIOS FOR REVIEWERS90		
	RE	FERENCES		
	BIOGRAPHICAL SKETCH			

Abstract of Dissertation Presented to the Graduate School of the University of Florida in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

VETERINARY STUDENTS' PREFERENCES FOR RESPONDING TO CLIENTS WHO ARE HAVING A DIFFICULT TIME COPING WITH THE ILLNESS, TREATMENT, OR DEATH OF A COMPANION ANIMAL

By

Carole Joy Dias

August 2002

Chairperson: Larry C. Loesch

Major Department: Counselor Education

The purpose of this study was to examine the differences in the ways in which veterinary students prefer to respond to clients who are having a difficult time coping with some aspect of their pet's care. Response preferences were measured across eight student attributes including (a) age, (b) gender, (c) level of education, (d) pet ownership, (e) having ever had a pet that died, (f) having ever been present during the euthanasia of a client's pet, (h) hours of coursework in client communications, and (i) area of specialty interest.

A "bogus profile" research technique was used in this study. Respondents were presented with five scenarios which depicted veterinary clinic visits in which clients expressed emotions concerning their pets. Respondents were asked to rate on a scale of 1 (very unlikely) to 5 (very likely), how likely they would be to make each of the four response choices. Factorial analyses of variance were employed to analyze the data.

Statistically significant differences were found for four of the eight student attributes. Differences in gender, level of education, hours of coursework in client communications, and specialty interest all impacted the types of responses the veterinary students preferred to give their clients. Females' means for feeling and referral responses were significantly higher than the corresponding means for males. The means for juniors and seniors were significantly higher than the mean for sophomores for the feeling response, and the mean for freshmen for the minimizing response was significantly higher than the minimizing response means for sophomores, juniors, and seniors. The minimizing response mean for students with no previous coursework in client communications was significantly higher than the mean for students having over ten hours of coursework. The technical mean for students with no specialty interest at this time and for those interested in specializing in small animal practices was higher than the corresponding means for students interested in large animal practices. The results of this study indicated that certain student attributes did affect veterinary students' preferences for responding to emotional clients.

## CHAPTER I INTRODUCTION

The love and affectional bonds between humans and animals are evident throughout society, and include infants to elders and just about any type of animal. Even the language used to describe the relationships that people share with animals is changing to reflect a higher status that is being awarded to animals. For example, many people are now referring to their pets as companion animals, a term thought to better reflect the mutuality of the human-animal bond, detract from the notion of animals as possessions or commodities, and to highlight the strength of the ties that can be formed with animals. These ties are perhaps most evident when an animal requires medical attention. Thus, as companion animals move into the homes and hearts of Americans and become recognized as important members of the family system, veterinarians are being challenged to view their profession from a relational perspective and to acknowledge the important role the human-animal bond has in veterinary medicine. Indeed, the strength of the relationship that can be formed between humans and animals is inciting veterinarians to provide services from a bond-centered approach that reaches beyond caring for the medical needs of animals to attending to the emotional needs of the people who have bonded with the animal. Today, emphasis in veterinary medicine is being given to the impact a pet's illness, medical treatment, or death has on the human-animal relationship as well as on the influence a human's emotional well being may have on the pet's health. As the vision of veterinary medicine expands to incorporate client (i.e., pet owner) as well as patient

(i.e., animal) needs, communication skills and compassion become as important for the veterinary medicine practitioner to possess as medical and diagnostic skills (McCurnin, 1999). Today's veterinary medicine clients are looking for more than just medical expertise; they are expecting veterinarians to listen to and take their needs seriously and to address concerns or worries they may have about their pet or their relationship with it.

This demand for expanded, more emotion-sensitive client services in turn directly impacts the necessary components and methods of effective programmatic delivery of veterinary education.

### Overview

The phrase "human-animal bond" refers to the psychological and emotional connection between people and animals. This bond not only implies the presence of a human and an animal, but also their consideration as a unit (Odendaal & Weyers, 1990). In an effort to understand the human-animal bond better, Brown and Silverman (1999) described the "attachment" and "commitment" components of the relationship.

Attachment represented the status and/or role of the pet in the family, such as that of child, confidant, or friend. Commitment was used to describe the pet owner's willingness to spend resources such as personal effort, time, money, and patience on the pet, or the resolve to keep a pet despite challenges to pet ownership.

The relationships that people share with their animals are held to be of significant value, especially for owners whose companion animals have a central position in their lives. Recent surveys by the American Animal Hospital Association (AAHA) indicated that of the 56 percent of Americans who owned at least one pet, 99 percent considered

their pets to be a member of the family, 70 percent viewed their pets as children (American Veterinary Medical Association [AVMA] 1999), 48 percent depended on their pets for emotional comfort, and 83 percent reported that they would risk their lives for their pets (Becker, 1999). Barker and Barker (1988) found no significant differences in emotional closeness between owners and their dogs and owners and their closest family member regardless of age, gender, family size, number of dogs owned, and length of dog ownership. Approximately one third of the participants in their study reported they were closer to their dogs than to any family member. Although dogs and cats remain the most popular companion animals in America (AVMA, 1996), birds, horses, reptiles, rabbits, ferrets, llamas, and goats are a few of the other species with which humans form close attachments. Given the diversity of animals with which humans form close affectional bonds, it seems evident that the shape, size, appearance, or unique characteristics of an animal has no bearing on the strength of the bond that can develop.

The strong connections that develop between humans and animals often have qualities similar to those in relationships between humans. For example, the relationships between animals and humans working together in a shared activity such as competitions, exhibitions, mountain rescue, search and rescue, or police work can become increasingly strong as the teamwork progresses (Stewart, 1999). Assistance animals, such as seeing eye dogs, hearing dogs, and dogs and primates trained to assist paralyzed individuals, are indeed unique companions who take on the roles of physical help-mates and social facilitators. Animals also can become the "significant other" for people who live alone and have little interaction with the world outside of their homes. They also can become the

surrogate children for childless couples or for parents whose children have left home.

Children who grow up with pets sometimes view their pets as siblings.

In 1990, the American Association for Marriage and Family Therapy (AAMFT) and the Society of Teachers of Family Medicine (STFM) established a joint task force with one of their goals being to promote family therapists and family physicians to work collaboratively (Tilley, 1990). Within the two disciplines, there is a common approach to mental and physical health based on a systemic, or wholistic perspective, and both share a belief in the importance of the context in which problems emerge, how they are maintained, and how they are solved (Becval & Becvar, 1993). Family has been defined as those with whom we share our most intimate social relationships, or those who are biologically, legally, or emotionally related (McDaniel, Campbell, & Seaburn, 1992). Thus, it is important for family therapists to recognize that pet owners share very close and affectionate relationships with their animals and that animals frequently are a very significant and treasured member of the family when conceptualizing the family structure or context.

Cain (1983) studied human-animal relationships in 60 families and found that 81% of the respondents reported pets as being sensitive to positive and negative feelings within the family, even to the point of experiencing physical symptoms when family tension was high. Triangulation is a term used in family systems theory to mean the process that occurs when a situation is increased beyond the level of tolerance for two people, and a third party is sought by one of the members of the dyad as an ally to support his or her position in a conflict with the other member of the dyad (Becvar & Becvar, 1993). The

ways in which companion animals are triangulated into (human) family interactions have been studied by several researchers. For example, Cain (1985) found that 48 percent of companion animal owners could give specific examples when their pet was used in a triangulated situation to relieve tension. Doane and Qualkinbush (1994) studied parrots as part of the family system and observed that, often, the parrots would become pawns, much like minor children, in families where members have poor relationships with each other. They also were frequently used by one family member to express hostility toward another member and were triangulated into dyads in times of conflict. Doane and Qualkinbush (1994) also noticed that in times of extreme tension between members of adult couples, the birds would act out, a behavior they attributed to an attempt by the parrots to draw attention to the "troublemaker," thus reducing the tension between the adult couple. Cain (1983) noted that there were situations in which family members expressed anger at a pet instead of another human family member, or hit a pet instead of the person to whom they were expressing anger.

Other studies have investigated ways in which animals improve the physical health of their owners (e.g., Barker, 1998; Nathanson, de Castro, Friend, & McMahon, 1997) as well as ways in which pets can reduce stress and anxiety (e.g., Barker & Dawson, 1998; Carmack & Fila, 1989; Harris, Rinehart, & Gerstman, 1993) improve mental health (e.g., Barker, 1998; Cole & Gawlinski, 1995; Proulx, 1998; Valiquette, 1999), provide feelings of safety and security (e.g., Frisby, 1998), increase socialization (e.g., Crowley-Robinson & Blackshaw, 1998; Darrah, 1996; Fick, 1993; Roenke & Mulligan, 1998), and help maintain consistency through life changes and experiences (e.g., Anderson, 1996; Lagoni,

Butler, & Hetts, 1994). As more is learned on the mutuality of human-animal relationships and the extent to which people and their pets become attached, it becomes increasingly apparent that humans facing a threat to that bond, such as illness, injury, or death of their companion animals, are likely to experience cognitive, behavioral, or emotional changes attributable to that threat. For example, when asked to describe the degree of loss felt by the family after a pet was lost or had died, 94.4% of respondents reported important to extreme loss, and 58.8% reported feeling extreme loss (Catanzaro, 1988). In another study, 93 percent of respondents experienced some disruption in their daily living routines and 70 percent reported that their social activities diminished after the death of a pet (Quackenbush & Glickman, 1984). For some people, the death of a companion animal has evoked as much or more sorrow and grief as when nuclear family members have died (Carmack, 1984). Unfortunately, however, family, friends, and coworkers often do not recognize or acknowledge the depth of pain that can be felt when a companion animal dies or the legitimacy of a person's reaction and concern when a pet is ill. Therefore, it is important for professionals such as veterinarians, counselors, and therapists to understand how strongly attached people can become to their animals and to openly address issues of grief and loss when working with clients whose pets are seriously ill or have died.

Awareness of the emotional context surrounding a pet's illness or death and then responding appropriately to their clients' needs is a significant challenge facing veterinary professionals. Veterinarians who view a sick or dying animal simply as a routine incident must now realize that to many pet owners, a threat to their companion animal's health

constitutes a crisis. Relatedly, veterinarians' skills in facilitating their clients' expressions of fear, concern, confusion, and other emotions can influence the choices their clients make for medical treatment for their companion animals. It also influences the amount of time spent explaining procedures to clients and, perhaps ultimately, whether clients will choose to return to a specific veterinary practice. For example, denial or disbelief, a common and useful reaction to hearing bad news, can be dangerous if it blocks effective action or causes a delay in seeking or deciding on medical treatment (Madewell, 1981). Clients who are not given the opportunity to explain feelings such as anger and frustration may find it difficult to discuss treatment options, fees, or other important components of their animal's care (Gants, 1996). General anxiety and concern about a pet's welfare, to say nothing of the emotional impact of observing a companion animal in pain, can cause clients to miss large pieces of conversation or to have difficulty making sense of what they have heard, thus making it necessary for veterinarians to repeat the same information several times (Horton, 1996).

Veterinarians who recognize the values inherent in focusing their work on the human-animal bond have found it to be beneficial for clients, patients, and their practices. Swift (1997) coined the term "pet lover's triangle" to describe the triangular relationship that develops between family members, pet, and veterinarian. Swift offered that the strength or weakness of this triangle impacted the pet's health as well as the practice's "bottom line." He also noted that effective communication was the way to strengthen what is typically the weakest side of the triangle: the relationship between the pet owner and the veterinarian. Becker (1996) referred to this triangular relationship as the "family-

pet-vet bond" and wrote that veterinary medicine involves the treatment of animals and people. He concluded that a veterinary practice can only be truly successful when fueled by the powerful and positive emotions of the bond.

Awareness that humans and animals form close and affectionate bonds is not new; indeed, documentation of positive human-animal relationships dates back several centuries. The use of animals for "therapeutic" purposes was first documented in 1792 at the York Retreat in England, where patients labeled "insane" were put in charge of caring for small animals. It was believed that the responsibility of caring for a creature that was weaker than oneself would provide a humane environment while helping patients establish self control (Valiquette, 1999). For similar reasons, animals became part of the therapeutic milieu in hospitals in Germany as early as 1867, when patients at an epileptic retreat were put in charge of farm animals or companion animals that lived in the institution (Arkow, 1990). A notable, much more recent example of animals assisting humans was the use of dogs, monkeys, and rabbits to reduce fear and anxiety for children and family survivors of the Oklahoma City bombing (Seigel, 1995), and the terrorist attacks on the World Trade Center in New York City.

Although awareness of the human-animal bond has existed for quite some time, attention to understanding how the relationships between people and their pets affect veterinary medicine services is relatively new. Pets have moved from the margins of people's lives to occupying central positions within family systems. Associated with this shift of companion animals to "family" status is a need for veterinary medical technology to meet the demands for services that improve the quality and quantity of life for

companion animals while recognizing and supporting the human-animal bond (AVMA, 1999).

Medical problems confronted by clinical veterinarians are often similar to those confronted by doctors in human medicine. People and animals share many of the same diseases, including asthma, arthritis, cancer, diabetes, epilepsy, high blood pressure, leukemia, and tuberculosis, to name a few. Research and medical advances in human medicine, such as anti-convulsants, hip and artificial joint replacements, bone graphs and implants, antibiotics, blood transfusions, chemotherapy, and kidney transplants, similarly are used to benefit animals. Thus, in the effort to provide a comprehensive approach to veterinary medicine, alternative and complementary treatment modalities used in human medicine are being pursued by veterinarians. For example, the AVMA (1996) has approved acupuncture, massage therapy, chiropractic, homeopathy, and nutraceutical (i.e., nutritional supplements) as valid treatments in veterinary care. Many veterinarians are choosing to specialize in specific areas of animal health care, such as oncology, neurology, ophthalmology, dermatology, and surgery as are their human medicine counterparts. Similarly, pet health insurance is offered to pet owners to assist with the financial responsibility of seeking medical care for their animals. Pet health insurance policies are similar to human insurance policies, and include annual premiums, deductibles, and different coverage plans to choose from based on client and animal needs.

Animal behavior is another area in which veterinary medicine resembles human medicine. Disorders such as *separation anxiety*, i.e., behavior that occurs when a pet, because of an abnormally close bond to its owner, becomes extremely distressed or

anxious when separated from the owner, are being taken more seriously (Tippin, 1999).

Behavior modification, a treatment used to alter human behavior, also is often the treatment of choice for pets whose behavior is inappropriate or intolerable for the owner.

The quality of life issue is another area in which pet owners are becoming more sensitive. Just as individuals want to endure as little physical suffering as possible in their own lives, pet owners are expecting the same quality of care for their companion animals. The option to end the pain and suffering a pet is experiencing, by agreeing to have it injected with a lethal dose of anesthesia, is an emotionally comforting option to have. However, this is also a very difficult and painful decision for many family members to make. It is not unusual for people to be confused about or question such decisions, or to experience feelings of extreme guilt or fear of the dying process or of coping with conflicting roles (Peterson, 1997). "How can I plan the death of someone I love?" "What will it be like for my pet during the injection?" "How can I truly love my companion animal if I am allowing her to be put to death?" When such decisions are being made, it is imperative for veterinarians to communicate effectively and do everything possible to ensure that the emotional and other needs and preferences of the family are understood. Failure of the veterinarian to communicate effectively the issues around euthanasia can result in clients feeling uncertain about the reason for considering euthanasia over other treatment options, confusion about the timing of the procedure, or feelings that they are being rushed or pressured into making a decision with no opportunity for discussion (Stewart, 1999). Accordingly, a veterinarian's failure to communicate or understand a patient or family's preferences concerning end of life issues also can lead to adverse

outcomes. Client satisfaction, anxiety, and compliance can all be related to communication between doctor and patient (Thompson, Nanni, & Schwankovsky, 1990). In a study done on how communication effectiveness affects patients' emotional distress, Roter, Hall, Kern, Barker, Cole, and Roca (1995) found that physicians' responsiveness to human patients' emotional states and probing specifically about a patient's feelings and emotions were associated with a reduction in psychological distress. A physician's willingness to share decision-making by giving patients the opportunity to choose among treatment options was associated with reductions in anxiety and depression (Fallowfield, Hall, & Maguire, 1990). Similarly, by including clients in the decision-making process, veterinarians help people understand the relevancy of diagnostic testing, dispel inaccurate preconceived notions about their pet's illness, help clients feel emotionally supported, and allow the pet owner to define "success," such as having one more night to spend with their pet.

It is difficult for family members to judge a medical professional's technical competence or qualifications, because most lay people do not have the knowledge or experience to make this assessment. Several studies have revealed similarities in the wishes, hopes, and expectations of veterinary clients and what patients anticipate and count on from their medical doctors (JAVMA, 1990). The cues most often used by people to form opinions of their medical doctors and veterinarians are social skills, such as sympathy, personal interest, kindness, sincerity, and listening skills (Chesler & Barbarin, 1984), and that they are treated with respect (Hart, Hart, & Mader, 1990).

Human and animal medical professionals appear to be working toward improved communication with their patients and clients. For example, some physicians are taking a "patient-centered" approach to communicate with their clients. In patient-centered communication, discussion does not revolve around the physician's medical agenda. Instead, conversation between patient and doctor is focused on the concerns of the patient, and the social, psychological, and emotional experiences of patients are assumed to be equally important to the somatic aspects (Graugaard & Finset, 2000). In veterinary medicine, this same model is referred to as a bond-centered practice, which is the concurrent delivery of both medicine-based and support-based veterinary services (Lagoni, Butler, & Hetts, 1994). Medical professionals who adhere to a patient- or bond-centered approach understand that it is not diseases, but rather the people, who must be the focus of health care (Bensing, Verhaak, van Dulmen, & Visser, 2000).

## Statement of the Problem

Medical professionals have begun utilizing basic counseling skills in their interviews and relationships with patients in the belief that a humanistic approach to medicine facilitates understanding of patients' needs, interests, concerns, ideas, and emotions, thus leading to increased patient satisfaction and improved health outcomes (Smith et al., 1999). Similarly, veterinary professionals are finding it necessary and helpful to use the same approach when communicating with their clients. Regardless of a veterinary student's specific career path, a vital skill required to be successful is the ability to effectively communicate with their clients. Yet, the vast majority of veterinary schools in America do not emphasize the "human side" of veterinary medicine in their curricula. It

appears that many veterinary colleges assume that students will learn to communicate effectively with clients, colleagues, and the general public through observation of and experience with others and therefore do not provide training or coursework for communication skills (Heath, 1996). In a study of student and faculty attitudes toward the veterinary medical profession and education, Hoppe and Trowald-Wigh (2000) noted that in addition to competency in specific knowledge and skills, the respondents indicated that veterinary surgeons need to have empathy, high ethical principles, and excellent interpersonal communication skills. In fact, training for "personal skills" was rated as most important by both groups. Further, the faculty respondents also indicated that current veterinary education practices do not fulfill their criteria regarding effective personal skills training.

Russel (1994) questioned over 200 practicing veterinarians in North America about their opinion of the skills of new veterinary graduates. Russel's respondents agreed almost unanimously that new graduates were well prepared with technical skills, but were frequently deficient in communication and interpersonal skills. Similarly, a survey by Fogel and Abrahamson (1990) revealed that among the veterinarians who took part in their survey, 96 percent had received no training on how to explain terminal illness to their clients, and 72 percent felt this training would be helpful.

Although the importance of the human-animal bond is inferred in the AVMA's Council on Education (COE) Accreditation Policies and Procedures manual, addressing human-animal bond issues in veterinary medicine curricula is not required as part of the Essentials for Accreditation (Williams, Butler, & Sontag, 1999). Thus, although the

importance of the human-animal bond and client support is recognized, many veterinary colleges are unable to address such matters due to overcrowded curricula or funding (Stewart, 1999).

Effective communication will strengthen, just as poor communication will weaken, the client-veterinarian relationship. Because veterinarians are routinely confronted with situations in which they must discuss sensitive medical and treatment concerns with their clients, skills to facilitate client expression of expectations, opinions, and feelings effectively are considered crucial (Graugaard & Finset, 2000). Challenging circumstances take a toll on the client-veterinarian relationship. Therefore, how a veterinarian responds to a client can make the difference between a highly successful practice and one that merely goes on.

Addressing one of the most traumatic aspects of veterinary medicine, Stewart (1999) wrote that although issues of pet death are potentially the greatest source of stress for practicing veterinarians, if handled well, it can also be the greatest source of satisfaction. That is, it can be the aspect of the job that is most appreciated by veterinary clients. Stewart observed that veterinarians received five times more thank you letters after a euthanasia than after a successful treatment or cure. Veterinarians who communicate effectively with their clients can often recognize their clients' fears, misunderstandings, or lack of knowledge, address these issues, and therefore prevent potential anger or conflict from occurring between clients and practitioners (Gants, 1996).

Effective communication has a direct impact on client retention and the success of a veterinary practice. Eighty percent of the complaints received by the California Veterinary Medical Ethics and Professional Conduct Committee stem from communication problems among the client, veterinarian, and hospital staff, and 99 percent of those problems could have been resolved with communication directly between the veterinarian and the client (California Veterinary Medical Association Ethics and Profession Conduct Committee, 1989). Unfortunately, 96 percent of dissatisfied veterinary clients never complain to the veterinarian who provided services to their animal. However, 91 percent of the complainants took their services to another veterinary practice (Gerson, 1993). Veterinarians often do not get a second chance to satisfy a customer! For those who did complain to the practitioner, and felt that their concerns were addressed, 73 percent indicated they would return to the practice in the future. It also is known that it is five times more cost effective to retain a client than to recruit a new one and that loyal clients are a key component to the success of a veterinary practice (McCurdy, 2000).

### Theoretical Framework

Both the individual and family counseling/therapy literature abound with information about the association between the nature of the client-therapist relationship and the establishment and achievement of therapeutic goals. Rogers' (1980) "person-centered" approach to counseling/therapy and Anderson's (1997) "collaborative partnership" between counselors and clients are just two examples of how theorists have reduced emphasis on structured interventions and techniques, and instead given priority to effective communication and interaction to enhance therapeutic (i.e., helpful) relationships. More than 30 years of counseling outcome research shows that the positive and effective results of psychotherapy are in direct proportion to the quality of the relationship, and also that

simple reliance on theories and techniques is giving way to authentic connectedness between therapist and client as the most important dynamics (Natiello, 1998).

Rogers' therapeutic ideas have been applied to many fields, including education, social work, medicine, as well as applied in organizational development. Accordingly, some medical researchers in human medicine are inviting a paradigm shift within their profession that will change the focus of clinical services from disease-oriented to patient-centered (e.g., Epstein, Campbell, Cohen-Cole, McWhinney, & Smilkstein, 1993; Graugaard & Finset, 2000; Keller & Carroll, 1994; Ong, de Haes, Hoos, & Lammes, 1995). At the heart of this movement is the belief that clinical practice in medicine involves communication between two people who are aiming to establish or sustain an effective working relationship in which mutual trust exists (Irwin, McClelland, & Love, 1989). The traditional model in which an authoritative doctor is solely in charge of medical decision making is giving way to an approach in which patients and physicians share decision making.

In Rogers' theory, basic core conditions such as empathy, respect, genuineness, unconditional acceptance, and warmth are believed to be crucial to the efficacy of the therapy, and focus is on the person instead of the presenting problem (Lazarus, 1979). In the person-centered approach, it is the client's relationship with a counselor who is congruent (i.e., matches external behavior and expression with internal feelings and thoughts), accepting, and empathic that brings about therapeutic change (Corey, 1977). Another aspect of Rogers' model is that counselors are not "all knowing," but rather strive to enter the client's view of reality (Lazarus, 1979).

In a similar manner, in "patient-centered" communication, the doctor-patient relationship is viewed as egalitarian and patients are encouraged to express all of their concerns, including symptoms, thoughts, feelings, and expectations (Ong et al., 1995). This communication model focuses on what is on the *patient's* mind; social, psychological, and emotional concerns are given equal status to the physical aspects of illness. Rapport and relationship building are thought to occur when physicians communicate with their patients in ways that encourage the patient's expressions of feelings and emotions (Roter, 2000).

Epstein et al. (1993) wrote that patient-centered medicine, much like person-centered counseling/therapy, is an attitude of mind and a moral position rather than any particular technique. Epstein also viewed the approach as a method in which people provide cues to their feelings, fears, and expectations which, if responded to appropriately, will lead to their expression, with the appropriate response being one that will encourage people to tell their stories. Thus, veterinarian responses such as "tell me what it is like to live with a dog that has cancer," or, "tell me what frightens you the most about the upcoming surgery on your horse" can unlock concerns and promote an expression of feelings that many clients never get the chance to explore.

Practicing veterinary medicine from a person-centered approach would require veterinarians to understand and respond to their clients' fears, feelings, perceptions, and expectations about their pets, and the reciprocal relationship among the illness, pet, and the life of the family. The common elements of person-centered therapy, such as empathic understanding, respect, warmth, and genuineness, therefore are used in this study as

possible responses that veterinary students can use when interacting with veterinary clients.

### Need for the Study

Some veterinary medicine practitioners, faculty, and students are aware of the important role the human-animal bond has in veterinary medicine and the importance of addressing the emotional needs of pet owners when delivering veterinary services. For example, of 21 veterinary colleges that took part in a survey (Serpell & Luftman, 2000) five reported offering courses to veterinary students on client relations and communication and having on-site client support and counseling. Two of these five had counselors available to support clients, but did not have coursework available to students. Eight of the respondents reported having pet loss hotlines only and one had a program emphasizing giving "gifts" (e.g., money) in memory of a pet. Several offered pet loss support groups. Thus, although the importance of the human-animal bond was evident at 18 of the 21 veterinary colleges from which responses were received, only one-fourth incorporated supportive services for clients in their veterinary school curricula.

Veterinary teaching hospitals are unique environments that influence how current and future veterinary practitioners address emotionally sensitive issues with their clients. A unique opportunity exists, therefore, to affect the ways in which veterinarians think about and relate to their clients. Just as physiology and pharmacology are necessary components of veterinary medicine, incorporation of veterinarian-client communication and relationship building coursework is also important if the goal truly is to better serve client and patient needs. Studies that focus on communication in client-veterinary relationships

thus provide opportunities to link communication and client satisfaction, and have a significant impact on the way veterinary students perceive, approach, and work with their clients when they enter their professional practices.

Efforts to better understand the variables that inhibit or enhance client-veterinarian communication, such as gender, age, experience, and education level of veterinary students, can provide higher education personnel with information that will aid in the development of effective education programs. Determining when and how veterinary medicine students feel the most comfortable when communicating with their clients will provide much needed information to educators on where to focus coursework. New educational methods can then be developed to help veterinary medicine students with the situations with which they are most likely to struggle.

#### Purpose of the Study

The purpose of this study is to determine veterinary medicine students' preferences in ways of responding to clients who are having a difficult time coping with the illness, treatment, or death of a companion animal. Eight variables, including student age, gender, education level, current pet ownership, previously having had a pet that died, previous experience of being present during the euthanasia of a client's pet, previous coursework in communication or client relations, and specialization interest, all will be examined to determine how specific student characteristics are associated with their response choices.

#### Hypotheses

The following hypotheses will be evaluated in this study:

 There is no significant difference in veterinary students' responses to emotional statements made by clients based on age.

- There is no significant difference in veterinary students' responses to emotional statements made by clients based on gender.
- There is no significant difference in veterinary students' responses to emotional statements made by clients based on education level.
  - 3a. There are no significant interaction effects for age and gender.
  - 3b. There are no significant interaction effects for age and level of education.
  - 3c. There are no significant interaction effects for gender and level of education.
  - There are no significant interaction effects among age, gender, and level of education.
- There is no significant difference in veterinary students' responses to emotional statements made by clients based on the student's current ownership of at least one pet.
- There is no significant difference in veterinary students' responses to emotional statements made by clients based on previously having owned a pet that died.
- There is no significant difference in veterinary students' responses based on previous experience of being present during the euthanasia of a client's pet.
  - There are no significant interaction effects for pet ownership and having had a pet that died.
  - 6b. There are no significant interaction effects for pet ownership and having been present during the euthanasia of a client's pet.
  - 6c. There are no significant interaction effects among having had a pet that died and having been present during the euthanasia of a client's pet.
  - 6d. There are no significant interaction effects among owning a pet, having had a pet that died, and having been present during the euthanasia of a client's pet.
- There is no significant difference in veterinary students' responses to emotional statements made by clients based on previous coursework in client communication or client relations.
- There is no significant difference in veterinary students' responses to emotional statements made by clients based on specialization interest; and, there are no significant interaction effects for hours of communication and specialty interest.

## Overview of the Remainder of the Study

The remainder of the study is organized into four chapters. The second chapter is a review of the literature relevant to the study. Chapter III includes research methodology. In Chapter IV, results of the data analysis are presented. Chapter V includes the discussion, implications, limitations, suggestions, and recommendations.

# CHAPTER II REVIEW OF THE RELATED LITERATURE

A review and synthesis of the literature relevant to the importance of veterinarians addressing the emotional needs of their clients is presented in this chapter. Unfortunately, there have been few research studies done specifically on this topic. Further, the majority of the published literature on client-veterinarian communications and relationships is narratives by veterinarians and other professionals and about their own experiences with clients and what they have come to understand through those experiences. Some authors (e.g. American Veterinary Medical Association, 1999; Barker, 1998) indicate a similarity between veterinary and pediatric medicine because there is a medical professional, patient, and third party involvement in these types of relationships (which is pertinent because many people view their pets as children or family members). Similarly, both professions are becoming aware of the need to attend to the emotional and social needs that their clients and patients experience as a result of a medical condition or illness. Therefore, literature on human physician-patient communications also is reviewed and incorporated here.

# Characteristics of Client Needs During Veterinary Consultations

The relationship between veterinarians and their clients is an important aspect of veterinary medicine, and it's quality often connected closely to client satisfaction with care. For example, in a study by Case (1988), 319 veterinary clients completed a questionnaire to indicate what they expected from their veterinarians. Case found that

client satisfaction during a veterinary visit had a higher correlation with the personal treatment the client received than did the medical attention the pet was given. Case also emphasized the importance of communication and rapport that the veterinarian should establish with the client in order to run a successful practice, and the need for clients to be regarded as much as "patients" as the animals themselves. Case concluded that clients not only seek good medical care for their pets, but also want veterinarians to show concern for their needs as the pet owner. These needs include good communication, being "listened to," and consideration for their individuality and feelings.

Much of the literature on client-veterinary relationships stresses the need for clients to feel their veterinarians are listening to them. In fact, "S/he doesn't listen" remains one of the most common reasons clients give for leaving any doctor, including veterinarians (JAVMA, 1990). Epstein et al. (1993) wrote about the need for medical professionals "to listen with both ears," symbolically assigning one ear to listen for medical information and the other to receive psychosocial information. Often, medical education places so much emphasis on communication of biomedical information that students don't learn to attend to the client's psychosocial information. Thus, veterinarian judgments made about the social and emotional aspects of people's lives are commonly made with minimum information about patients, clients, relationships, and circumstances involved in the illness (Engel, 1977).

Stutts (1997) surveyed veterinary clients and found that high on the clients' wish list is that their veterinarians be good communicators and good listeners. This included explaining procedures and diagnoses in a language that pet owners understand, discussing

potential complications from illness and treatments, including the possibility of death of the pet, to understand the importance of a pet to its owner, and to realize that people place their trust in the veterinarian to care for their animals.

Roter (2000) emphasized the mutuality in patient-doctor interactions. Roter cautioned that focusing on patient perspectives must not be done at the expense of the physician's role as medical service provider, but that the reciprocity of the relationship actually allows for both the medical and life world perspectives. Smith and Hoppe (1991) agreed with the necessity of shared expertise, a situation in which patients lead in the areas of their expertise, such as the symptoms, preferences, concerns and impact of illness, and doctors lead in the domain of scientific or medical expertise.

Levinson, Roter, Mullooy, Dull, & Frankl, (1997) investigated physician-patient communication behaviors associated with malpractice history in primary care physicians and surgeons. They found significant differences in the communication behaviors of primary care physicians who had malpractice claims filed against them and those physicians who did not. There were four areas of difference. First, primary care physicians with no claims filed against them spent more time with their patients, 18.3 vs.15.0 minutes on average. Next, primary care physicians with no claims were found to provide orientation to their patients about the process of the visit more frequently than did physicians with claims. Specifically, they said things such as, "First I will examine you and then we will talk the problem over" or "I will leave time to answer any questions you have." Third, the use of facilitative communication skills distinguished no-claims primary care physicians from physicians with claims against them. Facilitative comments included

statements inviting patients to talk more and/or to share their opinions about their medical problems or treatment. This type of interaction also was found to elicit important information from patients while making them feel their doctors cared about them and viewed them as important. Finally, the study demonstrated that no-claims physicians laughed and used humor more often than physicians who had claims filed against them. Adams, Bonnett, and Meek (2000) conducted a cross-sectional mailed survey of 177 veterinary clients to identify predictors of grief and clients' desires and needs as they related to pet death. It was found that respondents wanted specific services from their veterinarians around the time of their pet's death. Importantly here, almost all respondents believed their veterinarian should provide emotional support before and after their pet's death. Emotional support was perceived to be conveyed through the veterinarian's ability to make clients feel comfortable expressing their grief, acknowledgment of the depth of the human-animal bond, and comforting words and gestures. Most of the respondents also believed there was a high association between their ability to cope with their loss and a veterinarian who was supportive around the time of their pet's death. The author of this study concluded that, overall, it appeared that reactions to pet death were more likely to be associated with variables related to the owners, such as whether they received support from their veterinarian, their attitude toward euthanasia, social attitudes toward pet death, and their attachment to their pets, than with factors related to pets, such as age or presence of other pets in the household.

In Bittersweet Farewells (2000) Elizabeth Anderson captured the essence of the veterinarian's role as communicator during client-present euthanasia by noting that the way to make it as easy as possible for both the client and pet is to talk before, during, and after the procedure. In a related study, Robinson (1998) interviewed 58 owners who had their horses euthanized and found that of the 83 percent of owners who were present during the lethal injection, 84 percent described the process as peaceful. In particular, owners who described the euthanasia as peaceful and their veterinarians as friendly and compassionate were significantly more happy with the procedure. Conversely, the 10 percent of owners who described the euthanasia as a "bad experience" had significantly more unanswered questions about the euthanasia and a significantly longer period of grief following the process.

Moore (1997) wrote that some veterinarians limit therapeutic options because of preconceived notions about what clients desire and/or can afford, often under the guise of being empathic, such as, "This family doesn't have the money to put their dog on the new medication. Let's just go with the old, less expensive regimen and not mention the alternative, or they will feel pressured to do something they can't afford." Moore concluded that such thinking on the part of veterinarians prevents clients from having a choice in the care level they want for their pet. In actuality, clients want and expect full disclosure. Whether the veterinarian is discussing diagnosis, prognosis, laboratory work, or another patient-related matter, most clients want to know all of the facts and do not like being shielded or protected from unpleasant medical realities concerning their animal (JAVMA, 1990).

#### Veterinary Students' Preparation for Bond-Centered Practice

Despite growing recognition of the importance of emphasizing the human-animal bond in veterinary medicine, veterinary students are leaving their programs feeling unprepared to engage in effective communication with their clients in practice. Williams, Butler, and Sontag (1999) conducted a survey to assess veterinary students' perceptions of the importance of addressing the human-animal bond and the adequacy to which human-animal relationships are addressed in the curricula in veterinary colleges in the United States. Ninety-six percent of veterinary students who responded to the survey believed that addressing the bonds that owners have with their companion animals is within the professional domain of veterinary medicine. Sixty-one percent of the respondents believed that their current curricula did not adequately address human-animal bond issues. Gender was significantly related to the differences in perceptions, with female students appearing to have more interest in addressing the human-animal bond. In a similar study, Adams (as cited in Williams et al., 1999) surveyed first, second, third, and forth year veterinary students at the University of Ontario regarding their perceptions of the importance of the human-animal bond in veterinary medicine and whether they believed they were receiving adequate training to address the bond in their future practices. Ninety-nine percent of students who responded believed training in human relations was very important to their future success in practice, however, over 75 percent also believed their training did not prepare them for the human side of veterinary medicine. Tinga, Adams, Bonnett, and Ribble (2001) conducted a study to determine perceptions of veterinary students' technical and professional skills and found that forth level (senior)

veterinary students felt competent and comfortable with the technical aspects of veterinary medicine but many did not feel comfortable or competent in professional skills such as delivering bad news, helping clients with limited funds make treatment decisions, dealing with demanding clients, or euthanasia. More than half of the sophomores, juniors, seniors, and recent graduates in this study felt they had received technical skill instruction but less than half believed they had received professional skill instruction.

Practicing veterinarians agree that many graduates of veterinary colleges enter practice unprepared to effectively work and communicate with clients and staff (Russell, 1994; Hart, et al., 1990). Liz Wilson (2001) wrote that another way in which newly-graduated veterinarians communicate ineffectively with their clients, and can add to their clients confusion, is by losing track of their regular, everyday vocabulary. Wilson added that frequently, medical jargon becomes so second nature to new graduates that they no longer realize that not everyone understands the language they are speaking; a nosebleed becomes "epistaxis" and a hairball a "trichobezoar."

The literature indicated that veterinary students do appear to understand that communication skills such as empathy and caring, active listening, and attending to client needs are essential for a successful veterinary practice. However, many students are leaving veterinary college feeling less than confident with their ability to weave together the medical needs of their patients and the emotional needs of their clients. Although a bond-centered practice is becoming more of a goal to students, there is a need for more effective methods of training so that beginning veterinarians are prepared for the emotional situations that are certain to occur during their interactions with clients.

### Effectiveness and Use of Client/Person Centered Approaches

One explanation of the curative nature of a wide variety of diverse approaches to counseling is that different types of therapies all embody common factors (e.g. interpersonal, social, and affective) that are curative, although not necessarily emphasized by the theory of change central to the model (Lambert & Cattani-Thompson, 1996). A review of the literature indicated that some researchers differ on their views of whether these curative factors alone are enough to create therapeutic change (e.g., Patterson, 1984; Garfield, 1991). However, it appears safe to state that there are factors common across counseling approaches that have accounted for a substantial amount of improvement found in clients who have sought psychotherapy (Lambert, 1986). The common factors receiving the most research attention are those variables that form the core of person-centered counseling such as empathy, warmth, and positive regard (Lambert et al., 1996).

Lafferty, Beutler, and Crago (1989) examined differences between trainee psychotherapists who had been assigned to one of two groups; more effective or less effective therapists. Effectiveness was based on whether the majority of their clients' symptoms improved or worsened over the course of therapy. Examination of differences between "more effective" and "less effective" therapists showed therapists who were determined to be "less effective" exhibited lower levels of empathic understanding, and rated themselves as more supportive than the "more effective" therapists.

The medical literature on physician-patient communication also emphasizes the importance of factors inherent in person-centered therapy. Lazarus (1971) asked 112

clients whom he had seen in his practice to indicate their perceptions of the effects and the desirability of treatment, the therapeutic process, and the therapist. His clients reported that personal qualities of the therapist were much more important than specific interventions or techniques, and overall, there was little agreement among the respondents as to whether particular interventions or techniques were thought to be helpful. Miller, Taylor, and West (1980) found that the degree to which therapists showed empathy to clients proved to be a good predictor of client outcome obtained at 6-8 month follow-up interviews, with the most positive outcome in clients whose counselors ranked highest in empathy. Again, positive outcome was associated with counselor empathy rather than counseling theory, technique or interventions.

Kent, Wills, Faulkner, Parry, Whipp, and Coleman (1998) conducted a study where patients attending a cancer unit were asked to describe situations in which their emotional needs were and were not met by staff, to outline their feelings at the time, and to describe staff behavior. Of the 92 patients who responded to the questionnaire 21 (23%) related an incident when their emotional needs had not been met by the staff. Specific examples described by respondents included: "Doctors made me feel I was merely a case in a brown folder and not a person;" "I was just learning to cope without a voice. Because I couldn't speak, people tended to ignore me." For some of the 21 respondents who felt their needs were not met, most experienced anxiety and confusion, and some were so distraught over the incident that they wished to sever their relationship with the hospital. The most common advice for improvements offered by the patients included that staff increase

contact time with patients and give more extensive information, rather than suggestions related to skills or medical interventions.

In a study done to determine how women with breast cancer experienced physicianpatient communication, McWilliam, Brown, and Stewart (2000) found that when the
experience was rated as positive, the communication constituted a working relationship
involving four themes: feeling vulnerable; sharing information and building a relationship;
creating the experience of control; and mastering the experience of illness and learning to
live with breast cancer. Women who perceived the communication to be negative began
similarly with feelings of vulnerability. However, when sharing information and building a
relationship did not transpire in a positive manner, a working relationship did not occur.
Women whose physician-patient communication experience was viewed as negative
continued to feel vulnerable, out of control of their life and health, and unable to master
the experience of illness and learn to live with cancer.

Lipkin (1996) described a three-function model for medical interviewing. Lipkin wrote that the first function of the interview involved determining and monitoring problems and gathering data relevant to patient care. The second function is to develop, maintain, and sometimes close a therapeutic relationship with the patient and family. Lipkin listed the principal tasks associated with this function as defining the nature of the relationship, communicating competence, communicating interest, respect, support, empathy, overcoming barriers to the relationship, and eliciting the patient's and the family members' perspectives. Lipkin noted that as straightforward as these tasks are, it is tragic how often they are not accomplished in clinical situations. The third function of the

interview was to carry out patient education and implement a treatment plan. He noted that patients may not speak honestly or tell all of their story if they do not feel trust toward their physicians.

Other benefits of patient-centered communication cited in the literature include patient satisfaction (AIDS Alert, 2000; Frankel, 1995; Grant, Cissna, & Rossenfeld, 1995; Thompson et al., 1990), increased patient compliance (Clark, Nothwehr, Gong, & Evans, 1995; Cecil, 1988; Frankel, 1995; Thompson et al., 1990), increased feelings of control over disease (Clark, et al., 1995), increased enrollment in clinical trials (Grant, et al, 1995), patient empowerment (Luban-Plozza, 1995), clearer understanding of informed consent and informed choices (Lipkin, 1996), and less anxiety during consultations (Thompson, et al., 1990).

In summary, two themes appear to flow through the medical literature on patientcentered communication. One is that there is a synergistic interaction between the
biological and social/emotional components of medicine in that successful performance in
one enables and strengthens the performance of the other. The second theme in the
literature is that the way in which patient-physician communication unfolds can affect not
only the management of the illness, but the enactment of health and life within the
individual and family life context.

# Teaching Students Person-Centered Communication Skills

It has been proposed that medical professionals integrate patient-centered approaches into their relationships with clients, patients, and families, thus integrating understanding of the patient's needs, interests, concerns, ideas, requests, and emotions, into the doctor's

understanding of the disease process (Smith, 1996). Although much training in medical and veterinary colleges remains focused on biomedicine, barriers to person-centered training such as a lack of behaviorally defined descriptions of how one conducts a patient-centered interview, and a lack of support for such an approach are being overcome (Smith, Marshall-Dorsey, Osborn, Shebroe, Lyles, Stoffelmayr, Van Egeren, Mettler, Maduschke, Stanley, & Gardiner, 2000). Some medical and veterinary educators are turning their efforts toward developing training programs that will teach students the skills required to develop person-centered relationships as part of their curricula, and specific models for effective communication in medical settings are being developed as structured approaches to assist medical professionals in enhancing interactions with their patients and clients (Keller & Carroll, 1994; Heath, 1996). Researchers are attempting to demonstrate that communication skills are not the result of personality characteristics of the medical professional involved, but are based on a dynamic set of skills that can be taught.

Smith, Lyles, Mettler, Van Egeren, Stoffelmayr, Osborn, and Shebroe (2000) conducted a study to determine the effectiveness of an intensive psychosocial training program for internal medicine and family practice residents on patient satisfaction. A 29 item questionnaire was administered to patients before and after the residents received their training. The questionnaire evaluated patients' satisfaction regarding patient disclosure, physician empathy, confidence in physician, general satisfaction, and comparison of the resident with other physicians. The results indicated that patients of the trained residents expressed more confidence in their physicians and were generally more

satisfied than the patients of controls. The effect of training on patient satisfaction with patient disclosure and physician empathy was greater for female than for male residents.

Heath (1996) reported on a course taught to veterinary students which included seven lecture/discussions, and three 2-hour tutorials on effective communication. The tutorials contained role-plays of situations which were likely to be encountered by veterinarians. The objectives of the communication training were to teach students to:

1) communicate effectively with clients individually and in small groups; 2) communicate effectively with colleagues, partners, and the general public; 3) help avoid and resolve stress and conflict; 4) understand the impact of grief on clients and to counsel the bereaved; and 5) apply for and obtain a position appropriate to their skills and interests.

As a result of this training, 82 percent of the students felt their understanding of factors influencing communication with clients had increased. Fifty-eight percent of the veterinary students believed their skills in communicating had improved as a result of the course.

Levinson and Roter (1993) examined the effects of a 4 ½ hour and a 2 ½ day long communication skills training with physicians. Audiotapes of physicians' interactions with patients were made before and after the training and then compared. No effect on communication skills was found for those physicians who received the shorter training. The physicians enrolled in the 2 ½ day training asked more open-ended questions, asked patients' opinions more often, and gave more biomedical information than did the physicians in the shorter program. In addition, patients of the physicians in the longer training disclosed more biomedical and psychosocial information about themselves, and demonstrated fewer signs of outward distress during the visit. Similarly, Roter,

Rosenbaum, de Negri, Renaud, DiPrete-Brown, and Hernandez (1998) found that doctors who took part in training to improve their communication with patients used significantly more target skills post-training than their untrained colleagues, and used more facilitative communication and open-ended questions when interacting with their patients. There was also a trend toward more emotional conversation. Patients of trained doctors talked more overall, gave more information and used more positive talk, and were judged as sounding more dominant, responsive, and friendly than patients of doctors in the control group. Patient satisfaction tended to be higher for those who saw doctors taking part in the communication training.

A communication skills program incorporating cognitive and emotional domains of patient-physician interactions was developed to examine the effects of such training on patient satisfaction and anxiety levels (Evans, Kiellerup, Stanley, Burrows, & Sweet, 1987). Patients were interviewed and those who consulted with trained doctors reported being significantly more satisfied with their consultations, experienced less state anxiety, and increased positive feelings immediately following their visits. However, Graugaard & Finset (2000) studied the effects of patient-centered verses doctor-centered communication styles with students with low trait anxiety and high trait anxiety. They found that students with low trait anxiety were significantly more satisfied when their physicians used patient-centered communication, while students with high trait anxiety responded more positively to a doctor-centered than a patient-centered style of communication. The researchers offered that perhaps anxious patients preferred a firmer consultation structure or a paternalistic physician, or that the doctor's facilitation of

emotional expression and focus on psychosocial aspects of disease evoked difficult and therefore unpleasant feelings in the students with high trait anxiety immediately after the consultation, but the effect of the patient-centered communication style could turn out to be more positive in the long run.

Smith, Lyles, Mettler, Bertram, Stoffelmayr, Van Egeren, Marshall, Gardiner,
Maduschke, Stanley, Osborn, Shebroe, and Greenbaum (1998) examined the effects of a
training program in interviewing on residents' attitudes toward interviewing and patients'
physical and psychosocial well-being and satisfaction with care. The training group effect
for residents was especially clear for feelings of self-confidence in the ability to be sensitive
to patients' psychological and emotional concerns, to facilitate communication, and to
manage somatization problems. Residents in the training group were found to pursue
psychosocial information more often and were more patient-centered than residents who
did not receive training. Patients seen by residents trained in communication skills
expressed slightly greater satisfaction with medical visits than patients seen by untrained
residents, and they had greater measured physical and psychological well-being.

In summary, the literature indicated that training medical professionals to improve their communication skills with their patients and clients, and to utilize a person-centered approach in their interactions can benefit patients, clients, and families, as well as medical professionals themselves. Specific areas needing additional research include length of training required, most appropriate time to introduce communication skills training in the curriculum, and specific patient characteristics that might determine the effectiveness of patient-centered verses doctor-centered communication. There was a lack of research

available on the outcome of communication skills programs that were ongoing throughout medical education programs and provided ongoing performance feedback.

# Support for Assessment Instrument

The assessment used in this study will consist of 5 "bogus profiles" being presented in writing to veterinary students. Each profile will present a realistic situation which a veterinarian is likely to encounter in practice, and will involve a client becoming emotionally distraught over some aspect of a pet's illness, or the veterinary visit. Students will be asked to rate on a scale of one to five how likely they would be to respond to the client in a similar manner as offered in four possible responses. Results of the profiles will be analyzed to determine veterinary students' levels

of facilitative interaction when working with emotional clients. The responses will be scored to the relative level of preference rather than simply right or wrong.

Scenarios have been used in medical research to measure coping styles to threatening situations. The Threatening Medical Situations Inventory consists of four descriptions of threatening situations and participants are asked to rate six possible alternatives on five point scales (1= "not at all applicable to me" to 5 = "Strongly applicable to me.") (Van Zuuren & Hanewald, 1993). Similarly, employers are using realistic situational assessments as a tool for selecting personnel and have found these assessments to be a highly valid and a fair predictor of job performance (Pegorsch, 1998).

Advantages in using hypothetical situational scenarios as a methodology include all participants having, more or less, the same situation in mind when responding, and assuring that the items formulated are applicable to the situation at stake (van Zuuren, de

Groot, Mulder, Muris, 1995). Hanson, Horgen, and Borman (1998) wrote that presenting participants with actual situations they are likely to encounter and scoring their responses according to their perceived effectiveness in handling the situations has a high level of face validity. Mortowiklo, Dunnette, & Carter (1990) found situational tests to be a valid predictor of performance, especially for positions in which interpersonal interactions are important.

### CHAPTER III METHODOLOGY

### Statement of Purpose

The purpose of this study was to examine veterinary students' relative preferences for various types of responses to emotions and feelings expressed by (hypothetical) clients who are upset due to the illness, treatment, or death of a companion animal. Eight variables were investigated to determine how specific veterinary student characteristics are associated with their response choices.

This chapter describes the methodology used in the study. Included are descriptions of the relevant variables, population, sample, data collection procedures, instrumentation, and data analyses. The chapter concludes with discussion of the methodological limitations

## Relevant Variables

The dependent variables for this study were the respondents' indications (i.e., ratings) of likelihood of use of each of four types of responses (technical, feeling, minimizing or referral) for each of five scenarios. Technical responses focused on relating medical information about the pet to the client and the client's feelings or concerns were acknowledged but not explored. Technical responses were included in this study because providing such information to clients and patients is an important and necessary part of effective communication (Epstein et al., 1993). The sharing of biomedical information is how veterinary professionals educate clients on specific diseases, illnesses, and treatment

options. Feeling responses were those that were empathic, directly addressed the client's emotions, and encouraged clients to express their concerns and fears (Graugaard & Finset, 2000). The feeling responses were the responses based on "person-centered" communication and were used in this study as the responses representing effective clientveterinarian communication. Minimizing responses were meant to alter the client's emotions or give the message that "it's not so bad," "don't worry," or "everything will be alright." Minimizing responses did not acknowledge and validate the client's feelings or take the client seriously. Therefore, two necessary components of client-veterinarian communication (Snopek, 1996) were omitted with this response type. Minimizing responses were included in this study as an option for the respondents to not directly address the client's concern. Referral responses were those in which additional support was offered without exploring the client's feelings or encouraging further communication about what the client was experiencing. Referral responses were included in this study because providing veterinary clients with alternative resources for their emotional needs is quite appropriate.

The independent variables for the study included eight student attributes.

Veterinarian student variables -

- 1. age (20-25, 25-30, over 30)
- 2. gender (male or female)
- 3. level of education (freshman, sophomore, junior, senior)
- 4. current pet ownership (yes or no)
- 5. student having had a pet that has died (yes or no)

- 6. previous hours of coursework in client communication/relations (0, 1 to 10, over 10)
- specialty area or area of interest (small animal, large animal, other, no specialty interest)
- 8. previous experience in witnessing euthanasia of a client's pet (yes or no)

#### Population

The population of interest for this study was veterinary students in their freshman through senior years of academic (professional) preparation at a veterinary college. Years of preprofessional preparation for students entering veterinary college in the U.S. ranges from two to six. The average is 4.25 years of college upon entrance (American Association of Veterinary Medical Colleges [AAVMC], 2000). Students are accepted into veterinary college with a range of no degree completed, BS/BA degree, MS/MA degree, and Ph.D. In this study, freshmen through senior year referred to education after acceptance into veterinary college.

There are 27 veterinary colleges in the United States that meet the accreditation standards set by the Council on Education of the American Veterinary Medical

Association (Occupational Outlook Handbook, 2000). According to the American

Association of Veterinary Medical Colleges (2000), there were 9055 students enrolled in veterinary colleges in the United States in 1999. Of the 9055 students enrolled, 6425 were female and 2696 were male. Approximate number of students in each grade level in 2000 was 2361 freshmen, 2299 sophomores, 2219 juniors, and 2242 seniors. Caucasian students comprised 8238 (91%) of the total number of students. There also were 761 (9.5%) minority students and 56 (.5%) foreign national students in veterinary colleges in

the United States in 2000. The student attrition for classes 1999-2002 has been 121 students with 44 being attributed to low grades and 77 categorized as "other reasons." The mean age for veterinary students was 24.30 years.

Veterinary students at the University of Florida (UF) and Iowa State University (ISU) were selected as the sample for this study because students at these universities share characteristics with those of students in the other 25 veterinary colleges in the U.S. For example, the mean pre-vet (prior to applying to vet school) grade point average (GPA) for first year veterinary students in the 27 veterinary colleges is 3.56 on a four-point scale. At UF, the average GPA is 3.41 while at ISU it is 3.57. Similarly, the mean age of first year veterinary students in the U.S. is 24.30 while at UF it is 24.70 and at ISU it is 22.00. The U.S. average for years of pre-professional preparation at a veterinary college is 4.25. At ISU the average is 4.04 years and at UF the average is 4.90 years. Finally, the female to male ratio of veterinary students in the U.S. averages 2.38 females for every male. UF has a ratio of 2.88 females to every male student enrolled and ISU has a ratio of 1.70 female students for every male student enrolled (AAVMC, 2000).

Statistics for veterinary student pet ownership, type of pet owned, and whether students had a pet that died within the last year is not available, however, it is assumed that the percentage of these characteristics among veterinary students would be at least equal to those in the general population. Fifty-six percent of the American population lives with at least one pet (AVMA, 1999), with dogs (31.6%), cats (27.3%), birds (4.6%), and horses (1.5%) being the four most common types of pets owned. Statistics on veterinarian students who have witnessed or performed euthanasia on a companion animal

also are unknown, but it is assumed that those students who have had more experience in clinical settings, such as juniors and seniors, would have more opportunities to witness euthanasia.

The veterinary colleges at UF and ISU also were similar to the majority of other veterinary colleges in the country in curricula on the human-animal bond. At the time the data for this study was collected, neither UF or ISU students were offered a specific course on the human-animal bond.

According to the AVMA Veterinary Market Statistics (2000), of the 60,829 veterinarians belonging to the American Veterinary Medical Association in 1999, 45,200 worked in private clinical practices, 10,180 in public or corporate employment, and the employment status of 5449 members was unknown. Of those veterinarians working in private practice, 31,952 worked predominantly (5717) or exclusively (26,235) with small animals. Another 7621 worked with large animals predominantly (3876), exclusively (1894), or specialized in equine (horse) veterinary medicine (1851). In corporate and public employment, mixed animal practices employed 3418 veterinarians and 2209 categorized their practices as "other." Colleges and universities employed 4618 veterinarians in 1999, the United States government employed 2240. Industrial settings employed 1570 veterinarians and 1752 worked in "other" types of public and corporate employment.

#### Sample

The sample for this study consisted of 663 students currently enrolled in veterinary medicine programs at the UF and ISU Colleges of Veterinary Medicine. Total enrollment

in the two veterinary colleges at the time of this study was 720 students. Of the 663 measurement tools returned, five were omitted from the study due to scenarios that had not been completed by the participants. Therefore, the final sample consisted of 658 respondents (92.2% of total enrollment). Respondents ranged in age from 20 to 25, to over 30, with 69.5 percent being female and 30.5 percent being male. Freshman, sophomore, junior, and senior students took part in the study. Of the 658 respondents, 78.6 percent lived with a pet at the time of the study,

Hours that participants had in coursework addressing effective communication with clients ranged from 0 to over 10. No specialty area had been decided upon at the time of the study by 41.6 percent of the participants. Small animal medicine was the area in which 169 of the participants hoped to specialize, 112 were interested in large animal medicine, and 103 in other areas such as clinical pathology, radiology, and research. The number of respondents having been present at least once during the euthanasia of a client's pet was 585.

### Data Collection Procedures

Permission to conduct the study was received from the UF Institutional Review Board (IRB) on September 10, 2001. Therefore, all participating respondents provided information voluntarily. The Human Subjects Review Board at ISU was contacted by the principal investigator and it was determined that approval from that office was not necessary since the IRB at the University of Florida had granted permission for the study. The course schedules at UF and ISU were reviewed for required courses in which all veterinary students at each academic level would be enrolled. Professors of one required

course at each level were then approached in person by one of the two individuals who collected data, and asked to allow entrance into one class session for approximately 30 minutes for students to take part in a study that was being done to determine the ways in which veterinary students respond to their clients who are having a difficult time coping with the illness, treatment, or death of a companion animal. After approval was given by each of the professors, a date and time was arranged for the data collection.

During the data collection process, a brief summary of the study was presented to the students as was information that their participation was voluntary, and that they would not be required to identify themselves by name. Each student who agreed to participate was then given a packet that included the informed consent form (Appendix A), a demographic information sheet (Appendix B), and the five scenarios (Appendix C). They were given a general overview of how they were to respond (Appendix D) and any questions they had at that time were addressed. Each respondent was given a candy bar upon completion of the instrument.

# Instrumentation

The five scenarios and twenty response choices to be used in this study were developed by the researcher, in conjunction with the members of her doctoral studies committee and several faculty members from the UF College of Veterinary Medicine. In order to examine the construct validity of the responses, the 5 scenarios and 20 responses were reviewed and evaluated by ten therapists licensed in either marriage and family therapy or mental health counseling to validate response choice types prior to the study. The professionals were given a brief description of the purpose of the study with a list of

seven possible response types and a definition of each (Appendix E), and the five scenarios that were developed for the study with the 20 possible responses (Appendix F). They were asked to choose out of seven possible response types, the one that they believed best described each response and to put a checkmark next to that response type. The seven response types included the four types in the study which were technical, feeling, referral, and minimizing, as well as three additional types of responses including avoidant, rebuking, and denial. The three additional response choices were included as distractors. Haladyna (1994) wrote that professionals reviewing the items of a measurement tool should agree on the definition of the construct. For this study, the principal investigator and members of her supervisory committee agreed that 80% consensus was appropriate. In the first review, eight of the 20 responses did not obtain at least an 80% consensus by the professionals and those eight responses were rewritten by the principal investigator in a manner that better reflected the response type it was meant to be. The eight responses were then redistributed to the professionals to rate a second time. Agreement on each response type was at least 80% after the second rating.

The five scenarios describing a client-veterinary interaction likely to be encountered by practicing veterinarians were presented to each participant (Appendix C). Each scenario ended with a statement by the client expressing concern about her or his pet. Four different responses, including those intended to represent a technical, feeling, referral, and minimizing response, were presented following each scenario. The participating veterinary students were instructed to read each scenario carefully and then

to rate on a scale ranging from 1 (very unlikely) to 5 (very likely) for each response choice the likelihood that they would make such a response to the client.

After the participants returned their scenarios and responses, the responses were examined to determine if they were made correctly. Five participants did not respond to at least one of the scenarios, thereby leaving 5 responses unmarked, and those participants' packets were removed from the data pool. The data from the usable responses was then entered into a computerized database (SPSS) for subsequent analysis.

#### Data Analyses

For each response rating (total of 20), a 2 x 4 x 3 (respondent gender x level of education x age) factorial analysis of variance was computed to determine if there were significant differences among the means based on these factors. Similarly, a 2 x 2 x 2 (pet ownership x pet died x presence during euthanasia) factorial analysis of variance was computed to determine if there were significant differences among the means based on these factors. Next, a 3 x 4 (course hours in communications x specialty area) was computed to determine if there were significant differences between the means of these factors.

The psychometric properties of the measurement technique also were investigated. Coefficient Alpha was computed to determine the reliability across all 20 responses and resulted in a reliability coefficient of 62.19. In addition, the response means, standard deviations, and frequencies were computed for each of the response choices. Finally, a 20 x 20 intercorrelation matrix was computed in order to examine relationships among the responses.

### Methodological Limitations

The validity of the results of research that uses the bogus profile technique is primarily contingent upon the extent to which the respondents can identify psychologically with the profiles (i.e., scenarios) presented, that is, it is contingent upon the extent to which the respondents can envision themselves in the situations portrayed. In this study, it is likely that the respondents were able to identify with the presented scenarios to different degrees depending upon their previous experiences, personal characteristics, and level of professional preparation. However, the scenarios were developed to be situations in which the respondents are likely to find themselves in the future, and were evaluated by experts to have high probability in this regard. In addition, they are likely to be situations discussed in classrooms and other learning experiences for the respondents. Therefore, while this limitation is inherent in this type of research, it is not likely to be of significance among the respondents for this study.

A similar situation exists for the response choices presented to the participants. That is, the participants will have different levels of identification with each of the response choices, including the possibility that they might make a response not reflected in any of the choices presented. However, again, the response choices were carefully developed and evaluated for the study specifically because they represent the most likely response that would be given by a veterinarian. Therefore, again, this type of limitation is not likely to be significant in this research.

Another methodological limitation of this study was that only two veterinary colleges were used in the sample. However, the demographic characteristics of UF and ISU are similar to those of the other 25 veterinary colleges in the country. Also, the majority of veterinary colleges in the U.S. do not have human-animal bond or client communication coursework in their curricula, another characteristic shared by UF and ISU at the time of this study. Therefore, this limitation is not likely to detract substantially from the generalizability of the results.

### CHAPTER IV RESULTS

Presented in this chapter are the data and data analyses results from the between groups design used to examine differences in veterinary students' preferences for responding to the emotions expressed by a client during a veterinary clinic visit.

#### Descriptive Data

Of the 663 veterinary students contacted to participate in this study, 658 completed all 20 responses and their data were included in the analyses. This sample included 457 females (69.5%) and 201 males (30.5%). The four education levels were represented by 170 (25.8%) freshmen, 170 (25.8%) sophomores, 175 (26.6%) juniors, and 143 (21.7%) seniors. Four hundred and forty-four (67.5 %) of the participants were between the ages of 20 and 25, 147 (22.3%) were between 26 and 30, and 67 (10.2%) were over 30. At the time of the study, 517 (78.6%) participants were living with at least one pet and 627 (95.3%) had experienced the death of a pet at some time in their lives. Five hundred and eighty-five (88.9%) of the participants had been present at least once during the euthanasia of a client's pet. Small animal practice was the specialty interest of 169 (25.7%) of the participants. Large animal (e.g., horses, llamas, and farm animals) was the area in which 112 (17%) hoped to specialize and 103 (15.7%) were interested in specializing in other areas such as radiology, ophthalmology, or pathology. No specialty interest was reported by 274 (41.6%) of the participants. The number of participants having had no previous coursework in client communications was 193 (29.3%), while 367 (55.8%) had received

between one and ten hours and 98 (14.9%) of the participants had taken over ten hours in client communications.

### Intercorrelations

In order to examine patterns of responding, a 20-item intercorrelation matrix was generated. However, to facilitate understanding of patterns of responding, the results were interpreted by response type (i.e., counting the collections of significant correlations across the five responses for each of the four response types). A pattern of significant responses between the technical and minimizing responses was found. In general, respondents who indicated relative preference for technical responses also had relative preference for minimizing responses. A similar trend was found for the referral and feeling responses. In general, respondents who indicated relative preference for feeling responses also indicated relative preference for referral responses. Due to the size of the matrix, the results could not be shown in one table and therefore have been divided into Tables 1 through 6. The horizontal variable labels have been abbreviated but represent each of the variables in the vertical column.

Statistically significant, positive correlations were found for each response type across all scenarios, except for one. For example, the technical response in scenario 1 was significantly correlated with the technical responses in scenarios 2, 3, 4, and 5. The only exception was the technical response in scenario 5 and the technical response in scenario 3 were found to be not significantly correlated.

Table 1 presents the correlations of scenarios 1 and 2 and S1 and S2. In addition to significant, positive correlations between the same response types, significant negative

correlations were found between the technical and feeling responses in scenario 1, the feeling and minimizing responses in scenario 1, and the technical and feeling responses in scenario 2.

Table 1

Intercorrelations Among the Dependent Variables for Scenarios 1 and 2 and S1 and S2

Variables	S1-T	S1-R	S1-F	S1-M	S2-R	S2-T	S2-M	S2-F
Scenario 1 Technical	-	.095*	215**	.175**	.125**	.168*	.121**	.014
Scenario 1 Referral		-	.001	056	.185**	.011	005	.060
Scenario 1 Feeling			-	106**	.066	030	.074	.111**
Scenario 1 Minimizing				-	.024	.110**	.139**	.049
Scenario 2 Referral					-	033	073	046
Scenario 2 Technical						-	.120**	122**
Scenario 2 Minimizing							-	.128**
Scenario 2 Feeling								-

<sup>\*.</sup> p < 0 .01. \*\*. p < 0 .05.

In Table 2, positive correlations were found between the referral response in scenario 1 and the feeling response in scenario 4, the referral response in scenario 2 and the minimizing response in scenario 4, and the minimizing response in scenario 2 and the feeling responses in both scenarios 3 and 4. Statistically significant correlations also were found between the feeling response in scenario 1 and the referral responses in scenarios 3

and 4. A statistically significant, negative correlation was found between the feeling response in scenario 1 and the technical response in scenario 3.

Table 2

Intercorrelations Among the Dependent Variables for Scenarios 1 and 2 and S3 and S4

Variables	S3-M	S3-F	S3-T	S3-R	S4-F	S4-M	S4-R	S4-T
Scenario 1 Technical	.016**	016	.317**	.016	014	.178**	.058	.146**
Scenario 1 Referral	.050	.027	.074	.177**	.078*	.041	.243**	.185**
Scenario 1 Feeling	.024	.205**	086*	.181**	.252**	066	.136**	004
Scenario 1 Minimizing	.188**	.02	.086*	006	001	178**	.07	.088*
Scenario 2 Referral	.156**	.071	.048	.146**	.171**	.083*	.158**	.149**
Scenario 2 Technical	.158**	.070	.174**	.029	006	101**	.034	.159**
Scenario 2 Minimizing	.104**	.086*	.122**	.006	.086*	.167**	.102**	040
Scenario 2 Feeling	-	.137**	.022	.064	.118**	007	.115**	.035

<sup>\*.</sup> p < 0.01. \*\*. p < 0.05.

Table 3 presents the correlations between scenarios 1 and 2 and S-5. In addition to a significant, positive correlation between same response types, there were statistically significant, positive correlations between the technical response in scenario 1 and the minimizing response in scenario 5. The technical response in scenario 2 was significantly correlated with the minimizing response in scenario 5. Statistically significant, positive correlations also were found between the referral response in scenario 1 and the feeling

response in scenario 5, the referral response in scenario 2 and the feeling response in scenario 5, and the feeling response in scenario 1 and the referral response in scenario 5.

Table 3

Intercorrelations Among the Dependent Variables for Scenarios 1 and 2 and S5

Variables	S5-T	S5-R	S5-M	S5-F
Scenario 1 Technical	.090*	012	.121**	004
Scenario 1 Referral	.053	.231**	060	.098*
Scenario 1 Feeling	.043	.255**	051	.249**
Scenario 1 Minimizing	.051	.031	.177**	021
Scenario 2 Referral	.148**	.193**	.063	.091*
Scenario 2 Technical	.112**	.024	.110**	.054
Scenario 2 Minimizing	.139**	.003	.150**	.118**
Scenario 2 Feeling	.041	.055	.061	.085*

<sup>\*.</sup>p < .01. \*\*.p < .05.

Table 4 presents the correlations for scenarios 3 and 4 and S3 and S4. Statistically significant, positive correlations were found between the minimizing response in scenario 3 and the feeling, referral, and technical responses in scenario 4. The feeling and technical responses in scenario 3 were significantly correlated. A statistically significant, negative correlation was found between the feeling and minimizing responses in scenario 4. A significant, positive correlation was found between same response types in this set.

Table 4

Intercorrelations Among the Dependent Variables for Scenarios 3 and 4 and S3 and S4

Variables	S3-M	S3-F	S3-T	S3-R	S4-F	S4-M	S4-R	S4-T
Scenario 3 Minimizing	-	.011	048	101**	.139**	.221**	.082*	.140**
Scenario 3 Feeling		-	.144**	.009	.167**	052	.047	.083*
Scenario 3 Technical			-	.131**	.007	.116**	.024	.190**
Scenario 3 Referral					.161**	057	.289**	.079*
Scenario 4 Feeling					-	164**	.125**	.001
Scenario 4 Minimizing						-	.079*	.032
Scenario 4 Referral							-	.022
Scenario 4 Technical								-

<sup>\*.</sup> p < 0.01. \*\*. p < 0.05.

Correlations for scenarios 3 and 4 and S5 are shown in Table 5. Statistically significant, positive correlations were found between the feeling response in scenario 3 and the referral response in scenario 3 and the feeling response in scenario 5. Significant, positive correlations also were found between the feeling response in scenario 4 and the technical, minimizing, and referral responses in scenario 5, and the referral response in scenario 4 and the technical and feeling responses in scenario 5. No significant correlation was found between the technical response in scenario 3 and the technical response in scenario 5. A statistically significant, negative

correlation was found between the feeling response in scenario 4 and the minimizing response in scenario 5.

Table 5

Intercorrelations Among the Dependent Variables for Scenarios 3 and 4 and S5

Variables	S5-T	S5-R	S5-M	S5-F
Scenario 3 Minimizing	.211**	.044	.179**	.005
Scenario 3 Feeling	.065	.146**	009	.137**
Scenario 3 Technical	.070	.043	.102**	.085*
Scenario 3 Referral	.003	.421**	.025	.106**
Scenario 4 Feeling	.088*	.304**	085*	.097**
Scenario 4 Minimizing	.235**	074	.261**	010
Scenario 4 Referral	.131**	.333**	.021	.104**
Scenario 4 Fechnical	.088*	.061	.093*	.065

<sup>\*.</sup> p < 0 .01. \*\*. p < 0 .05.

Table 6 presents the correlations for scenario 5. Statistically significant, positive correlations were found between the technical and minimizing responses and the referral and feeling responses. Statistically significant, negative correlations were found between the technical and feeling responses and the referral and minimizing responses.

Table 6

Intercorrelations Among the Dependent Variables for Scenario 5 and S5

Variables	S5-T	S5-R	S5-M	S5-F
Scenario 5 Technical	-	0.019	.085**	106**
Scenario 5 Referral		-	136**	.093**
Scenario 5 Minimizing			-	014
Scenario 5 Feeling				-

<sup>\*\*.</sup> p < 0 .05.

Response frequencies were computed for each of the 20 response choices and are presented in Table 7. Means and standard deviations for the response choices are shown in Table 8. For scenario 1, the mean score was highest for the feeling response. The referral response had the highest mean score for scenario 2 and the mean score was highest for the minimizing response for scenario 3. For scenarios 4 and 5, the highest mean scores were found for the technical responses.

Table 7

Response Frequencies

Scenario/Response	Frequency/ Percent	Unlikely	Somewhat Likely	Undecided	Likely	Very Likely
Scenario 1	Frequency/	49	210	112	227	69
Technical Response	Percent	7.4	30.5	17.0	34.5	10.
Scenario 1	Frequency	26	107	96	309	120
Referral Response	Percent	4.0	16.3	14.6	47.0	18.2
Scenario 1	Frequency	10	86	93	288	181
Feeling Response	Percent	1.5	13.1	14.1	43.8	27.5
Scenario 1	Frequency	27	164	116	238	113
Minimizing Response	Percent	4.1	24.9	17.6	36.2	17.2
Scenario 2	Frequency	11	87	78	362	120
Referral Response	Percent	1.7	13.2	11.9	55.0	18.2
Scenario 2	Frequency	24	195	179	224	36
Technical Response	Percent	3.6	29.6	27.2	34.0	5.5
Scenario 2	Frequency	130	350	115	48	6
Minimizing Response	Percent	21.1	53.2	17.5	7.3	.9
Scenario 2	Frequency	17	98	145	310	88
Feeling Response	Percent	2.6	149	22.	47.1	13.4
Scenario 3	Frequency	3	33	52	338	232
Minimizing Response	Percent	.5	5.0	7.9	51.4	35.3
Scenario 3	Frequency	8	112	128	309	101
Feeling Response	Percent	1.2	17.0	19.5	47.0	15.3
Scenario 3	Frequency	47	236	158	177	40
Technical Response	Percent	7.1	35.9	24.0	26.9	6.1
Scenario 3	Frequency	29	170	178	214	67
Referral Response	Percent	4.4	25.8	27.1	32.5	10.

Table 7 continued.

Scenario/Response	Frequency/ Percent	Unlikely	Somewhat Likely	Undecided	Likely	Very Likely
Scenario 4	Frequency	11	89	82	373	103
Feeling Response	Percent	1.7	13.5	12.5	56.7	15.7
Scenario 4	Frequency	22	162	172	237	65
Minimizing Response	Percent	3.3	24.6	26.1	36.0	9.9
Scenario 4	Frequency	41	228	177	184	28
Referral Response	Percent	6.2	34.7	26.9	28.	4.3
Scenario 4	Frequency	4	45	80	353	176
Technical Response	Percent	.6	6.8	12.2	53.6	26.7
Scenario 5	Frequency	11	68	87	323	169
Technical Response	Percent	1.7	10.3	13.2	49.1	25.7
Scenario 5	Frequency	9	83	151	294	121
Referral Response	Percent	1.4	12.6	22.9	44.7	18.4
Scenario 5	Frequency	19	148	140	263	88
Minimizing Response	Percent	2.9	22.5	21.3	40.0	13.4
Scenario 5	Frequency	14	131	131	272	110
Feeling Response	Percent	2.1	19.9	19.9	41.3	16.7

Table 8

Means and Standard Deviations for Each Response

Scenario/Response	N	Mean	Standard Deviation
Scenario 1 - Treatment	658	3.1	1.166
Scenario 1 - Referral	658	3.59	1.082
Scenario 1 - Feeling	658	3.83	1.024
Scenario 1 - Minimizing	658	3.37	1.151
Scenario 2- Referral	658	3.75	.959
Scenario 2 - Technical	658	3.08	.998
Scenario 2 - Minimizing	658	2.14	.862
Scenario 2 - Feeling	658	3.54	.985
Scenario 3 - Minimizing	658	4.16	.805
Scenario 3 - Feeling	658	3.58	.982
Scenario 3 - Technical	658	2.89	1.070
Scenario 3 - Referral	658	3.18	1.066
Scenario 4 - Feeling	658	3.71	.944
Scenario 4 - Minimizing	658	3.24	1.038
Scenario 4 - Referral	658	2.89	1.018
Scenario 4 - Technical	658	3.99	.848
Scenario 5 - Technical	658	3.87	.968
Scenario 5 - Referral	658	3.66	.963
Scenario 5 - Minimizing	658	3.38	1.063
Scenario 5 - Feeling	658	3.51	1.054

Scores for each of the four response types were totaled for all 658 participants, resulting in four response total scores. Differences among the means of these four total

scores were analyzed in the factorial ANOVAs. The means and standard deviations for the response totals are presented in Table 9.

Table 9

Sums, Means and Standard Deviations for Response Types

Response	N	Sum	Mean	Standard Deviation
Technical	658	11139	16.93	2.885
Feeling	658	11952	18.16	2.845
Referral	658	11238	17.08	3.178
Minimizing	658	10725	16.30	2.894

# Analysis by Hypotheses

The probability level for the rejection of an hypothesis was p = .05 for all tests.

Ho1: There is no significant difference in veterinary students' responses to emotional statements made by clients based on age.

Based on the data in Table 10, this hypothesis was not rejected. The results of the factorial ANOVA revealed no significant differences in response preferences across age categories.

Table 10

Factorial Analysis of Variance Summary Table For Student Age

Source	DV	Type III SS	df	MS	F	Prob.
Age	Technical	2.404	2	1.202	0.143	.867
	Feeling	26.496	2	13.248	1.758	.173
	Referral	2.193	2	1.096	.115	.892
	Minimizing	21.332	2	10.666	1.314	.270

Ho2: There is no significant difference in veterinary students' responses to emotional statements made by clients based on gender.

Based on the data in Table 11, this hypothesis was rejected. The results of the factorial ANOVA indicated a significant difference in the means for feeling and referral responses based on gender. Females' means on feeling and referral responses were significantly higher than the corresponding means for males.

Table 11

<u>Factorial Analysis of Variance Summary Table for Student Gender</u>

Source	DV	Type III SS	df	MS	F	Prob.
Gender	Technical	19.072	1	19.072	2.265	.133
	Feeling	35.777	1	35.777	4.748	.030*
	Referral	112.702	1	112.702	11.806	.001*
	Minimizing	2.265E-02	1	2.265E-02	.003	.958

<sup>\*.</sup>p < .05.

Ho3: There is no significant difference in veterinary students' responses to emotional statements made by clients based on the student educational level.

Based on the data in Table 12, this hypothesis was rejected. There was a significant difference in the means for feeling and minimizing responses based on the education level of the student. The Tukey Honestly Significant Differences (HSD) Test was used as a multiple-comparison analysis to determine the pattern of significant differences. Significant differences in the means were found for education level in the feeling and minimizing responses. The means for juniors and seniors were significantly higher than the mean for sophomores for the feeling response. The minimizing response mean for freshmen was significantly higher than the means for sophomores, juniors, and seniors.

Table 12
Factorial Analysis of Variance Summary Table for Student's Level of Education

Source	DV	Type III SS	df	MS	F	Prob.
Ed. Level	Technical	19.388	3	6.463	0.768	0.512
	Feeling	81.102	3	27.034	3.588	.014*
	Referral	10.241	3	3.414	.358	.784
	Minimizing	116.721	3	38.907	4.792	.003*

<sup>\*.</sup>p < .05.

Table 13

Means for Feeling and Minimizing Responses for Level of Education

DV	Education Level	Mean	
Feeling Response	Freshman	18.08	
	Sophomore	17.47	
	Junior	18.48	
	Senior	18.70	
Minimizing Response	Freshman	17.21	
	Sophomore	16.41	
	Junior	15.79	
	Senior	15.71	

Ho3a: There are no significant interaction effects among age and gender.

Based on the data in Table 14, this hypothesis was not rejected. The results of the factorial ANOVA indicated no significant interaction effects among age and gender.

Ho3b: There are no significant interaction effects for age and level of education.

This hypothesis was not rejected. The factorial analysis of variance found no significant interaction effects for age and level of education.

Ho3c: There are no significant interaction effects for gender and level of education.

Based on the factorial ANOVA, this hypothesis was rejected. Table 14 shows that a significant interaction effect was found for gender and level of education.

Table 14

Factorial Analysis of Variance Summary Tables for Age by Gender, Age by Ed. Level, Gender by Ed. Level, and Age by Gender by Ed. Level

Source	DV	Type III SS	df	MS	F	Prob.
Age*Gender	Technical	30.11	2	15.055	1.788	.168
	Feeling	37.277	2	18.638	2.473	.085
	Referral	10.803	2	5.401	.566	.568
	Minimizing	.997	2	.498	.061	.940
Age*Ed.Level	Technical	10.472	6	1.745	.207	.975
	Feeling	87.878	6	14.646	1.944	.072
	Referral	60.309	6	10.052	1.053	.390
	Minimizing	36.632	6	6.105	.752	.608
Gender*Ed. Level	Technical	29.578	3	9.859	1.171	.320
	Feeling	82.744	3	27.581	3.660	.021*
	Referral	53.469	3	17.823	1.867	.134
	Minimizing	9.262	3	3.087	.380	.767
Age*Gender* Ed.Level	Technical	48.434	6	8.072	.959	.452
	Feeling	62.000	6	10.333	1.371	.224
	Referral	97.949	6	16.325	1.710	.116
	Minimizing	23.876	6	3.979	.490	.816

<sup>\*.</sup>p < .05.

Ho3d: There are no significant interaction effects for age, gender, and level of education.

As shown in Table 14, the factorial ANOVA found no significant interaction effects for age, gender, and level of education, therefore, this hypothesis was not rejected.

Ho4: There is no significant difference in veterinary students' responses to emotional statements made by clients based on the student currently living with a pet.

This hypothesis was not rejected. Based on the data in Table 15, no significant differences were found in student response means based on pet ownership.

Table 15

Factorial Analysis of Variance for Current Pet Ownership, Having Had a Pet That Died, and Presence During the Euthanasia of a Client's Pet

Source	DV	Type III SS	df	MS	F	Prob.
Pet	Technical	.931	1	.931	.112	.738
	Feeling	1.456	1	1.456	.179	.672
	Referral	21.122	1	21.122	2.114	.146
	Minimizing	1.013	1	1.013	.123	.726
Pet Died	Technical	11.243	1	11.243	1.345	.245
	Feeling	2.666	1	2.666	.328	.567
	Referral	1.584	1	1.584	.159	.691
	Minimizing	15.472	1	15.472	1.845	.175
Euthanasia	Technical	1.928E-02	1	1.928E-02	.002	.962
	Feeling	6.339	1	6.339	.780	.377
	Referral	.536	1	.536	.054	.817
	Minimizing	4.043	1	4.043	.482	.488

Ho5: There is no significant difference in veterinary students' responses to emotional statements made by clients based on the student having ever had a pet that died.

Based on the data in Table 15, this hypothesis was not rejected. No significant

differences were found in students' responses based on ever having a pet that died.

Ho6: There is no significant difference in veterinary students' responses to emotional statements made by clients based on the student having ever been present during the euthanasia of a client's pet.

This hypothesis was not rejected. Based on the factorial ANOVA, no significant differences were found in students' responses based on the student having ever been present during the euthanasia of a client's pet; see Table 15.

Ho6a: There are no significant interaction effects for pet ownership and having a pet that died.

This hypothesis was not rejected. No significant interaction effects were found for pet ownership and having a pet that died; see Table 16.

Ho6b: There are no significant interaction effects among pet ownership and having been present during the euthanasia of a client's pet.

This hypothesis was not rejected. As shown in Table 16, no significant interactions were found for pet ownership and having been present during the euthanasia of a client's pet.

Ho6c: There are no significant interaction effects among having a pet that died and having been present during the euthanasia of a client's pet.

This hypothesis was not rejected. No significant interaction effects were found for having a pet that died and having been present during the euthanasia of a client's pet; see Table 16.

Hoód: There are no significant interaction effects among owning a pet, having a pet that died, and having been present during the euthanasia of a client's pet.

This hypothesis was not rejected. As shown in Table 16, the factorial ANOVA found no interaction effects for owning a pet, having had a pet that died, and having ever been present during the euthanasia of a client's pet.

Table 16

Analysis of Variance Summary Table for Pet by Pet Died, Pet by Euthanasia, Pet Died by Euthanasia, and Pet by Pet Died by Euthanasia

Source	DV	Type III SS	df	MS	F	Prob
Pet * Pet Died	Technical	1.597E-03	1	1.597E-03	.000	.989
	Feeling	1.459	1	1.459	.180	.672
	Referral	16.793	1	16.793	1.681	.195
	Minimizing	1.505	1	1.505	.180	.672
Pet * Euth.	Technical	12.340	1	12.340	1.486	.223
	Feeling	4.552	1	4.552	.560	.454
	Referral	4.949	1	4.949	.495	.482
	Minimizing	5.160	1	5.160	.615	.433
Pet Died * Euth.	Technical	5.395	1	5.395	.650	.420
	Feeling	14.804	1	14.804	1.822	.178
	Referral	5.370	1	5.370	.538	.464
	Minimizing	9.857	1	9.857	1.176	.279
Pet * Pet Died * Euth.	Technical	11.147	1	11.147	1.343	.247
	Feeling	11.249	1	11.249	1.358	.240
	Referral	34.496	1	34.496	3.453	.064
	Minimizing	.816	1	.816	.097	.755

Ho7: There is no significant difference in veterinary students' responses to emotional statements made by clients based on the number of hours the student has had in communicating effectively with clients.

This hypothesis was rejected. Based on the data in Table 17, a significant difference was found for the minimizing response based on the number of hours the student had in communicating with clients. The Tukey HSD analysis showed that the mean for students with no previous coursework in client communications (16.649) was significantly higher than the mean for students having over ten hours of coursework (15.653).

Table 17 Factorial Analysis of Variance Summary Table for Communication, Specialty Interest, and Communication by Specialty Interest

Source	DV	Type III SS	df	MS	F	Prob.
Communication * Coursework	Technical	.598	2	.299	.036	.965
	Feeling	9.646	2	4.823	.597	.551
	Referral	4.591	2	2.295	.228	.796
	Minimizing	52.758	2	26.379	3.213	.041
Specialty	Technical	101.079	3	33.693	4.073	.007
	Feeling	34.268	3	11.423	1.415	.237
	Referral	63.581	3	21.194	2.109	.098
	Minimizing	28.459	3	9.486	1.155	.326
Communication * Specialty	Technical	41.118	6	6.853	.828	.548
	Feeling	33.540	6	5.590	.692	.656
	Referral	36.422	6	6.070	.604	.727
n < .05	Minimizing	113.080	6	18.847	2.295	.034*

Ho8: There is no significant difference in veterinary students' responses to emotional statements made by clients based on specialization interest; and, there are no significant interaction effects for hours of communication and specialty interest.

Based on the data in Table 17, this hypothesis was rejected. The factorial ANOVA showed a significant difference between the means for the technical and referral responses based on specialty interest. The mean for the technical response for students with a specialty interest in small animal practice (17.19) was significantly higher than the mean for students interested in large animal practices (16.17). The mean for the technical response for students with no specialty interest at this time (17.04) also was significantly higher than the mean for students interested in specializing in a large animal practice. A significant interaction effect was found for hours of communication and specialty interest.

# CHAPTER V DISCUSSION

Increasing awareness of the human-animal bond is challenging the veterinary profession to provide services that focus on the relationships between people and their pets. Effectively communicating with clients and addressing emotions that clients express are now just as important in veterinary medicine as are medical and diagnostic skills (McCurnin, 1999). Thus, the primary purpose of this study was to examine veterinary students' preferences for responding to clients who express emotions due to the illness, treatment, or death of a companion animal.

The discussion following is focused on the hypotheses tested. Also discussed are the limitations of this study, implications, and recommendations for future research.

# Limitations

Limitations related to the use of volunteers, such as level of respondents' motivation, must be considered in this study. Respondents were made aware that their participation in this study was voluntary, both prior to beginning the measurement tool and when reading the consent form. However, the number of veterinary students at ISU and UF totals 720, and 658 (91%) of those students took part in the study. Many of those who did not participate were not present at the time the study was given. Therefore, the number of students who chose not to volunteer in this study was minimal and should not have impacted the results. In general then, the respondent sample was an excellent representation of veterinary students.

Awareness of participation in a research project is another consideration for this study. After reading the consent form, students knew they were volunteering for a study to examine their responses to clients who make emotional comments during a veterinary visit. Knowing that their responses were being scrutinized could have impacted the choices they made for their responses. However, the responses were developed in a manner that would decrease the likelihood of the respondents ability to identify how they were "supposed to answer;" any reaction to possible scrutiny should not have substantially affected their responses.

#### Conclusions

Following is a discussion of the results and how they relate to the previous literature on use of communication skills by veterinary professionals. It should be noted that because research in this area is relatively new, several of the independent variables examined in this study were not addressed in the literature review. Therefore, the results here for those variables could not be compared with those of other studies.

Given that the technical and minimizing responses can be considered "non-emotional" and that the feeling and referral responses can be considered "emotional" in nature, the pattern of correlations among the respective sets of responses is as would be expected. Similar results have been found often in the research on facilitative or active listening among persons in the counseling and other helping professions. In general, those who are interested in and/or able to interact with others at an emotional level tend to do so across situations and, conversely, those who are not interested and/or able to interact emotionally tend to avoid such interactions across situations. Therefore, the respondents in this study

tended to exhibit response patterns that are typical of what has been found in research on other populations of professionals.

# Hypotheses

#### Age

Age was included in this study to examine whether "life experiences" had an impact on response preferences. Age was not a significant influence on the type of response given. Additionally, no significant interaction effects were found for age and gender, age and level of education, or age, gender, and level of education. Previous literature on age and veterinary students' communication preferences could not be found in the literature.

#### Gender

Gender-based differences in response choices were found. Females made more feeling and referral responses than did males, a finding supported by previous research in which female veterinary students were significantly more likely than males to agree that a veterinarian should be concerned about the emotional bonds that clients have with their pets (Willliams, Butler, & Sontag, 1999). There also was a significant interaction effect between gender and education level. The highest mean was found for the feeling response for senior females (19.19), with junior females having the second highest mean (19.03) for the feeling response. The lowest mean was for the minimizing response for senior females (15.67).

#### Education Level

A significant difference was found in the means of the feeling and minimizing responses based on the education level of the veterinary students. Multiple comparison analyses revealed that juniors and seniors preferred feeling responses more than did sophomores. Freshmen preferred feeling responses more than sophomores but less than juniors and seniors, however, these differences were not significant. A previous study by Tinga et al. (2001) investigated how veterinary students and recent graduates rated the respective values of technical and professional skills. Professional skills included recognition of the human-animal bond, interpersonal skills, and communication skills. They found that freshmen, sophomores, and juniors rated technical skills as more valuable than professional skills, whereas senior students and recent graduates rated the two as equally important.

Multiple comparison analyses also revealed a significant difference in minimizing responses between freshmen and the other three education levels, with freshmen preferring the minimizing response more often than sophomores, juniors, and seniors. Considering these results, it is likely that the importance of the human-animal bond in veterinary medicine increases with education level and experience. Students at a higher educational level also would have had more opportunity to work with emotional clients and gain some level of comfort in emotional situations.

# Pet Ownership

Pet ownership was included in this study to examine if students currently living with a pet would be more empathic of their clients' situations. Whether a student currently owned a pet did not impact their response preferences. There also were no significant interaction effects for pet ownership and having had a pet that died, or pet ownership and being present during the euthanasia of a client's pet. This was another attribute examined in this study that was not addressed in the previous literature.

# Pet Died

No significant differences in the means were found for respondents who did or did not ever have a pet that died. There also were no significant interaction effects among owning a pet, having had a pet that died, and having ever been present during the euthanasia of a client's pet. This attribute was included in the study to determine if experiencing the death of a personal pet would impact the type of responses students made to their clients; it had not been addressed previously in the professional literature.

# Presence During Euthanasia

No significant differences were found based on ever having been present during the euthanasia of a client's pet. No previous studies of this attribute were found in the literature review.

# Hours of Client Communication Studies

A significant difference was found for veterinary students' responses to emotional statements made by their clients based on the number of hours they had completed in client communications. Multiple comparison analyses revealed that the minimizing response mean for students with no previous coursework in effective client communications was significantly higher than the mean for students with over ten hours of communication coursework. This finding coincides with the results of the level of education variable where freshmen preferred the minimizing response to a significantly greater degree than did the other three education levels. In this study, students with over

ten hours of coursework in client communications scored lower on the minimizing response than students with one to ten hours, but the difference was not significant.

These results support previous research on teaching effective communication. For example, Levinson and Roter (1993) found that the length of training in client communications had a direct impact on the type of communicating physicians did with their patients. Those with longer training periods asked more open-ended questions, asked patients' opinions more often, and gave more medical information than did the physicians with shorter or no training. Smith et al. (1998) similarly found that residents who completed a training program in interviewing clients had an increase in their ability to be sensitive to patients' psychological and emotional concerns and to facilitate communication.

### Specialty Interest

A significant difference was found for the means of the technical and referral responses based on the specialty interest of students. The technical response mean for students interested in specializing in small animal medicine was significantly higher than the mean for students interested in large animal practices. The technical mean for students with no specialty interest also was significantly higher than the mean for students interested in large animal practices. There also was a significant interaction for specialty interest and hours of client communication coursework. The highest mean was for the feeling response for students with over 10 hours of communication coursework who had specialty interests in the category of "other." Williams et al. (1999) examined veterinary students' perceptions about the need to address human-animal bond issues with their

clients and found that of the three tracks examined (i.e., small animal, large animal, and general), respondents in small animal tracks were significantly more likely to agree that clients' emotional bonds with their animals should be addressed. In this study, respondents with a specialty interest in small animal practice scored significantly higher on the technical mean than did the other specialty areas, but there was no significant difference for the feeling response.

#### Implications

#### Theory

Person-centered communication occurs when medical or veterinary professionals respond to their clients' expressions of feelings and emotions in ways that promote conversation and exploration of what the person is experiencing (Roter, 2000, & Epstein et al., 1993). In this study, the *feeling* response directly addressed the emotions expressed by clients in the scenarios and was therefore the response most indicative of person-centered communication. Many practicing veterinarians rank people skills higher than analytic and scientific skills (e.g., Tinga et al., 2001; Lloyd & Covert, 2001, Williams et al., 1999), and effective medical interviews are believed to be those which address both physical and psychological concerns (Epstein et al., 1993). The ability for professionals to communicate effectively is a skill that can be learned and is part of the curricula in both the counseling and medical fields. Therefore, it was predicted that an increase in attributes associated with exposure to the need for addressing a client's emotions (i.e., higher education level, specialty area, presence during the euthanasia of a client's pet, and hours of communication coursework) would generate a preference for feeling responses. It also

was believed that certain personal characteristics (i.e., age, gender, owning a pet, and having had a pet that died) would lead to a preference for feeling responses. Three of the four academic/clinic variables investigated in this study did lead to a significant increase in the feeling response means. Having ever been present during the euthanasia of a client's pet did not impact the type of response preferred. Gender was the only personal characteristic that lead to a preference for the feeling response.

# **Education and Training**

Four of the independent variables (i.e., age, pet ownership, having had a pet that died, and presence during euthanasia) were not found to have a direct impact on students' response preferences. Interestingly, the three attributes having to do with pets did not significantly affect the results of how students responded to their clients and all three attributes having to do with academics did significantly impact their responses. This supports previous research (Smith et al., 2000; Heath, 1996; Levinson & Roter, 1993; Roter et al, 1998; Evans et al., 1987; and Graugaard & Finset, 2000) which found that effective communication skills are not the result of personality characteristics of the medical professional involved, but rather are based on skills that can be taught. Such information reinforces the appeal for veterinary colleges to include communications training in their curricula. These results also suggest that communication coursework at the junior and senior levels could reinforce effective communication skills at a time when they have had the education and experience necessary to warrant an interest in communication skills. Since freshmen preferred to minimize their clients' feelings, and are not yet at a point in their education where they have had the educational and clinical

experiences that often arouse interest in communicating effectively with clients, introductory courses on the human-animal bond, or basic listening skills training (i.e., eye contact, posture, paraphrasing) would be a way of prefacing more in depth coursework on communicating with clients which would come at higher levels of their veterinary education.

### Veterinary Medicine Practice

Although participants of this study have not yet entered veterinary practices, the tendency for feeling responses to increase in the junior and senior year of veterinary education and with over ten hours of coursework in client communications indicates that the closer students get to entering their professional practices, the more they prefer to respond to their clients in a feeling manner. With bond-centered veterinary practices being encouraged by the veterinary profession, veterinarians entering the field with effective communication skills and knowledge of how the human-animal bond ultimately affects their clients and patients, practitioners hiring these individuals, as well as clients and animals utilizing services from these practices, will greatly benefit.

#### Research

The significant interaction found between hours of communication coursework and specialty interest should be further examined. The highest mean was found in the feeling response for students who had over ten hours of communication coursework and had indicated their specialty interest to be other (i.e., pathology, radiology). The areas of veterinary medicine included in other are areas in which the practitioner would not have direct communication with clients. Specifically examining the impact of the various

specialty areas within the other category would provide insight as to why and how this specialty area impacts feeling responses. The lowest mean was found in the technical response between students having 1 to 10 hours of coursework with a specialty interest in large/farm animal practice. Again, closer examination of the specific specialty areas within the large and farm animal category is indicated. For example, some large animals (i.e., horses, goats, pigs, & llamas) are companion animals while some are raised as food animals (i.e., cows & pigs). While it is expected that veterinarians working with companion animals would not prefer a technical response when clients express emotions, it is surprising that those interested in farm or food animals would score low on technical preferences. Dividing the categories would provide a closer look at these variables.

Significant interactions between gender and level of education also should be studied more closely. The highest mean for these variables was for the feeling response for female seniors. The feeling mean for male freshmen was higher than the mean for the other three education levels which suggests that as male students progress through their veterinary education, their preferences for feeling responses decline. Further studies should be done to determine if this finding is consistent, and if it is, development of communication programs would need to take these gender differences in to consideration.

Ways of assessing actual student responses also would be beneficial to examine more closely. For example, in this study, students were provided with responses and did not have to pull them from their own thoughts or verbalize them in their personal communication style. Nor could their comfort level in talking to their clients about emotional concerns be assessed. Studies where participants write their own responses or

ideally, are observed working with emotional clients either real or in role playing, would provide a more individual and realistic measurement for their responses.

# Recommendations

### Theory

Rogers' person-centered therapy and patient-centered communication are closely related with both realizing the value of understanding another persons experiences from her/his perspective. The basic tenets of person-centered therapy have proven effective across a variety of fields, including medicine. Person-centered communication is now entering veterinary medicine and has been labeled the human-animal bond approach. This type of approach to veterinary medicine is still in its infancy and is more a goal than a current practice. Although many similarities exist between human and veterinary medicine, there also are inherent differences unique to veterinary medicine and therefore must be considered when developing effective models of communication. For example, veterinary professionals must introduce and discuss the option of euthanasia with clients and then prepare clients, who often remain present for the procedure, for what to expect. Veterinary clients have the option of finding a new home for their pet if they cannot afford the expenses of medical treatment. Animals are still considered to be "possessions" which affects the rights they have, and this also is an issue that frequently arises in the veterinary profession. Occasionally, veterinarians must attempt to dissuade clients from having their pets put to sleep, or refuse to carry out treatments due to a client's inability to pay, Therefore, it is necessary for veterinary professionals to take the core or basic tenets of the patient-centered theory, such as collaboration, mutuality, and working from the client's

perspective, and to add to it specific ways of addressing the issues unique to the veterinary profession.

### **Education and Training**

It is recommended that coursework on client communications be offered to veterinary students at each of the four levels of their education. Freshmen who are just beginning their education and are eager to learn the technical components of veterinary medicine could receive a lecture on the human-animal bond as a way of introducing the client aspect of the profession without focusing on specific ways to enhance the client-veterinarian relationship. Sophomores could be offered a course in basic communication skills which would help prepare them for their clinic work which often begins in the junior year. Training during the junior and senior years should be more focused on specific situations that arise in the clinics and the appropriate ways of addressing client emotions such as fear, anxiety, sadness, confusion, and anger. Not only would students at these levels be able to bring their own experiences from the clinic into the training but they also are at a point in their education where they are beginning to think about their own practices and are more aware of the need to communicate effectively with their clients. Incorporating different training procedures, such as videotapes, role plays, guest speakers, and group exercises would be a helpful way of bringing interest and various perspectives to the training.

# Veterinary Medicine Practice

Since interest in effective client-veterinary communication increases with education and experience, efforts to learn more about the human-animal bond and the emotional needs of clients should not end when veterinary students graduate. Professionals seeking the newest information on the medical aspects of the field will also benefit from learning the newest information available on client needs and expectations. Additionally, effective communication skills can enhance job satisfaction when utilized with coworkers and peers within a veterinary practice by helping to avoid misunderstandings and job burnout by allowing for open communication and expression on the job.

# Research

This study measured veterinary students' preferences for responding to clients who express emotions during a veterinary clinic visit. It is recommended that similar studies be done with clients to determine the type of response they would prefer. For example, the same or similar scenarios could be used and veterinary clients could be asked to rate on a scale of 1 to 5 how they think a veterinary professional should respond to the (hypothetical) client in the scenario. Although the literature clearly indicates that veterinary clients are demanding that their emotional needs be addressed by veterinarians, no previous studies were found where clients were asked their preferences for veterinary responses in specific situations.

A recommendation for future research is to examine student response preferences for consistency across scenarios to determine if response types are preferred in various situations. This study totaled the response for each of the four response types so the individual participants were not examined to see if those who preferred feeling responses preferred them for all situations. For example, would students be more likely to directly

address the emotions of clients during the euthanasia of a pet than they would be to explore a suicidal ideation a client expresses.

Closer examination of the impact of gender on students' response preferences is another area in which future research should focus. For example, would students prefer feeling responses more often for a male or female client, and would these results vary given the gender of the student? Do veterinary students feel more comfortable when a female client cries than they do when a male client is in tears? Similarly, do female or male students feel more comfortable crying in front of a client based on client gender?

In summary, this study found that there are certain student attributes (i.e., gender, level of education, hours in client communications coursework, & specialty interest) that impact the way veterinary students prefer to respond to clients who express emotions due to the illness, treatment, or death of a pet. Research such as this is important to the veterinary profession as many veterinary professionals are realizing the need for addressing their clients emotions yet do not feel comfortable or competent in doing so. The more understanding gleaned on the needs of both clients and veterinary professionals, the better training can be developed to help students learn how to share effective communication with their clients.

Research on the human-animal bond also is important for the counseling profession. In order to better understand family structures and dynamics, counselors and therapists must explore their clients' meaning of family, which frequently includes one or more pets. Learning about the role, status, and priority that a pet is given in a family will assist counselors and family therapists in visualizing the complete context in which their clients'

issues and concerns arise, how they are maintained, and possibilities for how they might be solved.

## APPENDIX A INFORMED CONSENT FORM

Project Title: Veterinary Students' Preferences for Responding to Pet Owners Who Express Emotional Discomfort Over the Illness, Treatment, or Death of a Companion Animal,

Principal Investigator: CVM Companions Program University of Florida, College of Veterinary Medicine Phone: (352) 392-4700 ext. 4744 Larry C. Loesch, Ph.D. Dept. of Counselor Education University of Florida Phone: (352) 392-0731 ext. 225

Description: The purpose of this study is to examine veterinary students' preferences for various types of responses to emotions and feelings expressed by their clients who are upset over the illness, treatment, or death of a companion animal. If you volunteer for this study, you will be asked to read five scenarios and rate your likelihood to make each of the four response choices for each scenario. You also are asked to respond to nine demographic information questions. Your participation will require approximately 20 minutes. You will not be asked to identify yourself by name for this study. However, you are asked to sign this consent form to indicate your agree to participate. You should separate this form from the instrument and place it in the box provided by the investigator so that your responses will remain separate and anonymous.

The benefits of this study will be that faculty of veterinary colleges will have a better understanding of the communication/interactional patterns of veterinary students with their clients. This information will be helpful for faculty who wish to incorporate client communication skills in to the veterinary school curricula. The study also will be helpful to veterinary students if they gain insight into their comfort levels when working with emotional clients. The possible risk to you in participating in this study is a slight possibility of emotional discomfort if any of the scenarios remind you of a difficult situation you have encountered with a veterinary client. For your participation in the study, you will receive a small bag of candy as a token of appreciation. Your participation in this study is completely voluntary and you may stop or choose not to respond at any time.

Authorization: I have read the above and understand the nature of this study and agree to participate. I understand that by agreeing to participate in this study I have not waived any legal or human rights. I also understand that I have the right to refuse to participate and that my right to withdraw from participation at any time during the study will be respected with no coercion or prejudice. I have received a copy of this description.

If you have any questions regarding this study, please contact me at 392-4700 ext. 4744 or stop by my office at VS-8B in the Small Animal Clinic.

Any questions or concerns about your rights can be directed to the UFIRB office, Box 112250, University of Florida, Gainesville, FL 32611-2250.

Participant Signature	Date

# APPENDIX B STUDENT DEMOGRAPHIC INFORMATION

Please complete the following questions by circling the answer that best describes you.

1.	Age.	20 - 23	25 - 30	Ove	r 30		
2.	Gender:	Female	Male				
3.	Level of	education:	Freshman	Sophomore	Junior	Senior	
4.	Current j	pet ownersl	nip: Yes	No			
5.	Have you	ever had a	personal pet th	nat died? Yes	No		
7.	How man	ny hours we training?	ould you estima 0 1 -	ate you have had	1 in client com Over 10	munication/rel	ations in your
8.	Is there a	n area of v	eterinary medic	ine in which yo	u hope to spec	cialize? Yes	No
	(If yes, p	lease indica	te the area in the	he space above)			
9.	Have you	heen prese	ent during the e	uthanasia of a o	liont's mat?	V N	

# APPENDIX C EXAMPLE OF SCENARIOS USED IN STUDY

#### Scenario 1

Mr. Jackson brings his dog Bella to you for emergency treatment. Mr. Jackson explains that while taking Bella for a car ride earlier in the day, Bella jumped out of the window while the car was moving and landed on the paved road. Bella is now unable to stand up and appears to be in significant pain. Mr. Jackson tells you that he feels extremely guilty about the accident and he keeps repeating "it's my fault. It's my fault. If she dies, I will never forgive myself."

Following are some different responses that might now be made to address Mr. Jackson's feelings of guilt and concern. Please indicate your likelihood of making each of the possible responses.

Mr. Jackson, I understand why you are upset about Bella. Try not to blame yourself; accidents happen, and you did the right thing to bring Bella in to be evaluated. She has been a healthy dog up to this point and she is young, so she has those two things going for her. We will run some tests on Bella and give her a thorough examination. For now, let's try to remain optimistic.

l 2 3 4 5 Very Unlikely Unlecided Likely Very Likely

Mr. Jackson, I can see how much you care about Bella and that you are blaming yourself for what has happened to her. I know the thought of anything happening to Bella is painful for you because of how much she means to you. It is OK to be upset and concerned about Bella. After an examination and some tests, we will know more about the extent of Bella's injuries and how we will be able to help her.

 1
 2
 3
 4
 5

 Very Unlikely
 Unlekely
 Undecided
 Likely
 Very Likely

I can see you are concerned about Bella, Mr. Jackson. I'm concerned too. She does seem to have some neurological dysfunction and to be experiencing some pain. I would recommend that we begin Bella's assessment with a complete neurological examination and some x-rays. When we get those results, we will know more about what we can do to help Bella.

 1
 2
 3
 4
 5

 Very Unlikely
 Unlikely
 Undecided
 Likely
 Very Likely

Mr. Jackson, you seem very upset. Since Bella cannot stand up and is experiencing some pain, there is a possibility that she has some neurological dysfunction. We will be running some tests and doing an examination on Bella. We have a counselor here who can talk with you about how you are feeling because of what has happened to Bella. Would you like to talk with her?

I 2 3 4 5 Very Unlikely Undecided Likely Very Likely

# APPENDIX D GENERAL OVERVIEW TO PARTICIPANTS

This study is being done to examine veterinary students' preferences for responding to emotional clients. When you receive the packet, you will find two consent forms and the measurement tool which consists of five scenarios. If you agree to participate, please read and sign one of the consent forms and return it with the scenarios. The other form is for you to keep.

Your participation in this study is strictly voluntary and you do not need to put your name on the response sheets. The study will take approximately 20 minutes for you to complete. There are three boxes in the front of the room. When you are finished, please put your signed consent form in one box and your responses in another. The third box contains candy bars. Please pick up as my way of saying thank you for your time.

# APPENDIX E INSTRUCTIONS TO PROFESSIONALS REVIEWING RESPONSES

The purpose of this study is to examine the likelihood of use of selected responses that veterinary students might make to clients in various situations they are likely to encounter in professional practice. There are five scenarios to be used in the study and there are four responses to the client for each scenario. Each of these responses is designed to reflect one of seven possible response types:

- technical the response is focused on medical information and/or treatment planning only
- avoidant the response is an attempt to avoid having to deal with the client's current emotions
- 3. denial the response completely ignores the client's current emotions
- 4. minimizing the response minimizes the importance of the client's emotions
- 5. rebuking the response criticizes the client for having the emotions presented
- 6. feeling the response is an attempt to deal directly with the client's current emotions
- 7. referral the response is an attempt to avoid the client's emotions by having the client talk to another person

Following are the five scenarios and the four responses for each scenario. Please indicate which type of response you think each of the presented responses is by checking ONE TYPE for each response.

# APPENDIX F EXAMPLE OF SCENARIOS FOR REVIEWERS

#### Scenario 1

Mr. Jackson brings his dog Bella to you for emergency treatment. Mr. Jackson explains that while taking Bella for a car ride earlier in the day, Bella jumped out of the window while the car was moving and landed on the paved road. Bella is now unable to stand up and appears to be in significant pain. Mr. Jackson tells you that he feels extremely guilty about the accident and he keeps repeating "it's my fault. If she dies, I will never forgive myself."

Following are some different responses that might now be made to address Mr. Jackson's feelings of guilt and concern. Please indicate the type of response you believe each to be.

Mr. Jackson, I understand why you are upset about Bella. Try not to blame yourself; accidents happen, and you did the right thing to bring Bella in to be evaluated. She has been a healthy dog up to this point and she is young, so she has those two things going for her. We will run some tests on Bella and give her a thorough examination. For now, let's try to remain optimistic.

1 2 3 4 5 Technical Avoidant Minimizing Referral Feeling

Mr. Jackson, I can see how much you care about Bella and that you are blaming yourself for what has happened to her. I know the thought of anything happening to Bella is painful for you because of how much she means to you. It is to Kt to be upset and concerned about Bella. After an examination and some tests, we will know more about the extent of Bella's injuries and how we will be able to help her.

1 2 3 4 5 Technical Avoidant Minimizing Referral Feeling

I can see you are concerned about Bella Mr. Jackson. I'm concerned too. She does seem to have some neurological dysfunction and to be experiencing some pain. I would recommend that we begin Bella's assessment with a complete neurological examination and some x-rays. When we get those results, we will know more about what we can do to help Bella.

1 2 3 4 5
Technical Avoidant Minimizing Referral Feeling

Mr. Jackson, you seem very upset. Since Bella cannot stand up and is experiencing some pain, there is a possibility that she has some neurological dysfunction. We will be running some tests and doing an examination on Bella. We have a counselor here who can talk with you about how you are feeling because of what has happened to Bella. Would you like to talk with her?

1 2 3 4 5 Technical Avoidant Minimizing Referral Feeling

#### REFERENCES

Adams, C., Bonnett, B., & Meek, A. (2000). Predictors of owner response to companion animal death in 177 clients from 14 practices in Ontario. *Journal of the American Veterinary Medical Association*, 9 (1), 1303-1309.

AIDS Alert (2000). Physician empathy affects HIV patient satisfaction. HIV Dent, 15 (12), 1-2.

American Association of Veterinary Medical Colleges. (2000). Comparative data report for 1999-2000. Washington, DC: AAVMC.

American Veterinary Medical Association. (2000). Occupational Outlook Handbook. Schaumburg, IL: AVMA.

American Veterinary Medical Association. (2000). Veterinary Market Statistics. www.avma.org/cim/vstat1.htm. 4/8/01.

American Veterinary Medical Association. (1999). JAVMA steers members through changing profession. *Journal of the American Veterinary Medical Association*, 214 (10), 1449-1450.

American Veterinary Medical Association. (1996). Guidelines for alternative and complementary veterinary medicine. www.naturalholistic.com/nhpc/ handouts / avmarule.htm. 2/10/01.

American Veterinary Medical Association Center for Information Management. (1996). U.S. Pet Ownership and Demographics Sourcebook. Schaumburg, IL: AVMA.

American Veterinary Medicine Association, Journal of. (1990). The human side of veterinary medicine: Client hopes, client expectations. *Journal of the American Veterinary Medical Association*, 197 (12), 1596-1597.

Anderson, E. (2000). Bittersweet farewells: Novel approaches to euthanasia and grief counseling ease emotional turmoil. *Veterinary Practice News*, 12 (7), 1-16.

Anderson, H. (1997). Conversation, language, and possibilities: A postmodern approach to therapy. New York, NY: Basic Books.

- Anderson, M. (1996). Coping with sorrow on the loss of your pet (2nd ed.). Loveland, CO: Alpine.
- Arkow, P. (1990). Pet therapy: A study and resource guide for the use of companion animals in selected therapies (6<sup>th</sup> ed.). Colorado Springs, CO: The Human Society of the Pikes Peak Region.
- Barker, S. (1998, September). Physical and emotional value of the human-animal bond. Animals, humans, and public health. A symposium on people and animals designed to showcase inter-relationships between veterinary and human medicine. Symposium conducted at Virginia-Maryland Regional College of Veterinary Medicine, Virginia Tech, Blacksburg, Virginia.
- Barker, S. B., & Barker, R. T. (1988). The human-canine bond: Closer than family ties? *Journal of Mental Health Counseling*, 10 (1), 45-46.
- Barker, S., & Dawson, K. (1998). The effects of animal-assisted therapy on anxiety ratings of hospitalized psychiatric patients. *Psychiatric Services*, 49 (6), 797-801.
- Becker, M. (2000). Make clients feel wanted. Veterinary Economics, 41 (10), 56-58.
- Becker, M. (1999). Pets keep people healthy. Veterinary Economics, 40 (1), 40-45.
- Becker, M. (1996). The rewards of being part of the family-pet-vet bond. *Veterinary Economics*, 37 (3), 96-98.
- Becvar, D., & Becvar, R. (1993). Family therapy: A systemic integration (2<sup>nd</sup> ed.). Boston, MA: Allyn and Bacon.
- Bensing, J. M., Verhaak, F. M., van Dulmen, A. M., & Visser, A. (2000). Communication: The royal pathway to patient-centered medicine. *Patient Education and Counseling*, 39, 1-3.
- Brown, J., & Silverman, J. (1999). The current and future market for veterinarians and veterinary medical services in the United States. *Journal of the American Veterinary Medical Association*, 215 (2), 161-183.
- Cain, A. O. (1985). Pets as family members. Marriage and Family Review, 8 (3-4), 5-10.

Cain, A. O. (1983). A study of pets in the family system. In Katcher, A., and Beck A., *New perspectives on our lives with companion animals*. Philadelphia, PA: University of Pennsylvania Press.

California Veterinary Medical Association Ethics and Professional Conduct Committee. (1989). Better communication = better client satisfaction. *California Veterinarian*, 43 (1), 16-17.

Carmack, B. J. (1984). Assisting bereaved pet owners: Guidelines for veterinarians. *California Veterinarian*, 38 (8), 28-30.

Carmack, B. J., & Fila, D. (1989). Animal-assisted therapy: A nursing intervention. *Nursing Management*, 20 (5), 96-101.

Case, D. B. (1988). Survey of expectations among clients of three small animal clinics. *Journal of the American Veterinary Medical Association*, 192 (4), 498-502.

Catanzaro, T. E. (1988). A survey on the question of how well veterinarians are prepared to predict their client's human-animal bond. *Journal of the American Veterinary Medical Association*, 192 (12), 1707-1711.

Cecil, D. (1988). Relational control patterns in physician-patient clinical encounters: Continuing the conversation. *Health Communication*, 10 (2), 125-149.

Chesler, M. A., & Barbarin, O. A. (1984). Relating to the medical staff: How parents of children with cancer see the issues. *Health and Social Work*, 9 (1), 49-65.

Clark, N. M., Nothwehr, F., Gong, M., & Evans, D. (1995). Physician-patient partnership in managing chronic illness. *Academic Medicine*, 70 (11), 957-959.

Cole, K. M., & Gawlinski, A. (1995). Animal-assisted therapy in the intensive care unit: A staff nurse's dream comes true. *Nursing Clinics of North America*, 30 (3), 529-537.

Corey, G. (1977). Theory and practice of counseling and psychotherapy, (2<sup>nd</sup> ed.). Monterey, CA: Brooks/Cole.

Crowley-Robinson, P., & Blackshaw, J. K. (1998). Pet ownership and health status of elderly in the community. *Anthrozoos, 11* (3), 168-171.

Darrah, J. P. (1996). A pilot survey of animal-facilitated therapy in Southern California and South Dakota nursing homes. *Occupational Therapy International*, 3 (2), 105-121.

- Doane, B. M., & Qualkinbush, T. (1994). My parrot, my friend: An owner's guide to parrot behavior. New York, NY: Howell.
- Engel, G. L., (1977). The need for a new medical model: A challenge for biomedicine. *Science*, 196, 129-136.
- Epstein, R., Campbell, T., Cohen-Cole, A., McWhinney, I. & Smilkstein, G. (1993). Perspectives on patient doctor communication. *The Journal of Family Practice*, 37 (4), 377-388.
- Evans, B. J., Kiellerup, F. D., Stanley, R. O., Burrows, G. D., & Sweet, B. (1987). A communication skills programme for increasing patients' satisfaction with general practice consultations. *British Journal of Medical Psychology*, 60 (4), 373-378.
- Fallowfield, L. J., Hall, A., & Maguire, C. P. (1990). Psychological outcomes of different treatment policies in women with early breast cancer outside a clinical trial. *British Medical Journal*, 301 (6752), 575-580.
- Fick, K. M. (1993). The influence of an animal on social interactions of nursing home residents in a group setting. American Journal of Occupational Therapy, 47 (6), 529-534.
- Fogle, B., & Abrahamson, D. (1990). Pet loss: A survey of the attitudes and feelings of practicing veterinarians. *Anthrozoos*, 3 (3), 143-150.
- Frankel, R. M. (1995). Emotions and the physician-patient relationship. Motivation and Emotion, 19 (3), 163-173.
- Frisby, H. R. (1998). Psychological, emotional, and social benefits of animals. PetEducation.com. 8/18/00.
- Gants, R. (1996). Help! When clients' tempers burst into flame. *Veterinary Economics*, 37 (3), 78-82.
- Garfield, S. L. (1991). Common and specific factors in psychotherapy. *Journal of Integrative and Eclectic Psychotherapy*, 10, 5-13.
- Gerson, R. F. (1993). Beyond customer service: Keeping clients for life. Menlo Park, CA: Crisp Publications.
- Grant, C. H., Cissna, K. N., & Rosenfeld, L. B. (1995). Patients' perceptions of physicians communication and outcomes of the accrual to trial process. *Health Communication*, 12 (1), 23-39.

- Graugaard, P. K., & Finset, A. (2000). Trait anxiety and reactions to patientcentered and doctor-centered styles of communication: An experimental study. *Psychosomatic Medicine*, 62 (1), 33-39.
- Haladyna, T. M. (1994). Developing and validating multiple-choice test items. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Hansen, M. A., Horgen, K. E., & Borman, W. C. (1998). Situational judgement: An alternative approach to selection test development. University of South Florida and Personnel Decisions Research Institutes. www.internationalmta.org/1998/9834d.html. 3/18/01.
- Harris, M. D., Rinehart, J. M., & Gerstman, J. (1993). Animal-assisted therapy for the homebound. *Holistic Nurse Practitioner*, 8 (1), 27-37.
- Hart, L. A., Hart, B. L., & Mader, B. (1990). Humane euthanasia and companion animal death: Caring for the animal, the client, and the veterinarian. *Journal of the* American Veterinary Medical Association, 197 (10), 1292-1299.
- Heath, T. (1996). Teaching communication skills to veterinary students. *Journal of Veterinary Medical Education*, 23 (1), 2-7.
- Hoppe, A. & Trowald-Wigh, G. (2000). Student versus faculty attitudes toward the veterinary medical profession and education. *Journal of Veterinary Medicine Education*, 27 (2), 17-23.
- Horton, D. (1996). Things sure look different from the other side. *Veterinary Economics*, 37 (6), 82-83.
- Irwin, W. G., McClelland, R., & Love, A. H. G. (1989). Communication skills training for medical students: An integrated approach. *Medical Education*, 23, 387.
- Keller, V. F., & Carroll, J. G. (1994). A new model for physician-patient communication. *Patient Education and Counseling*, 23, 131-140.
- Kent, G., Wills, G., Faulkner, A., Parry, G., Whipp, M., & Coleman, R. (1998). Patient reactions to met and unmet psychological need: A critical incident analysis. Patient Education and Counseling, 28 (2), 187-190.
- Lafferty, P., Beutler, L. E., & Crago, M. (1989). Differences between more and less effective psychotherapists: A study of select therapist variables. *Journal of Consulting and Clinical Psychology*, 57 (1), 76-80.

Lagoni, L., Butler, C., & Hetts, S. (1994). The human-animal bond and grief. Philadelphia, PA: Saunders.

Lambert, M. J. (1986). Some implications of psychotherapy research for eclectic practice. *Journal of Integrative and Eclectic Psychotherapy*, 5 (1), 16-45.

Lambert, M. J., & Cattani-Thompson, K. (1996). Current findings regarding the effectiveness of counseling: Implications for practice. *Journal of Counseling and Development*, 74 (6), 601-608.

Lazarus, R. S. (1979). Personality. Englewood Cliffs, NJ: Prentice-Hall.

Lazarus, A. A. (1971). Behavior therapy and beyond. New York, NY: McGraw-Hill.

Levinson, W, & Roter, D. L. (1993). The effects of two continuing medical education programs on communication skills of practicing primary care physicians. Journal of General Internal Medicine, 8 (6), 318-324.

Levinson, W., Roter, D. L., Mullooy, J. P., Dull, V. T., & Frankel, R. M. (1997). Physician-patient communication: The relationship with malpractice claims among primary care physicians and surgeons. *Physician-Patient Communication*, (277) 7, 553-559.

Lipkin, M. (1996). Patient education and counseling in the context of modern patient-physician-family communication. *Patient Education and Counseling*, 27, 5-11.

Lloyd, J. W., & Covert, B. R. (2001). Veterinary practice management education in the Association of American Veterinary Medical Colleges member colleges during 1999. Journal of the American Veterinary Medical Association, 219 (2) 176-179.

Luban-Plozza, B. (1995). Empowerment techniques: From doctor-centered (Balint approach) to patient-centered discussion groups. *Patient Education and Counseling*, 26, 257-263.

Madewell, B. R. (1981). Interaction with owners of cancer-stricken pets. *Journal of the American Veterinary Medical Association*, 178 (1), 30-32.

McCurdy, D. (2000). Move clients to the top. Veterinary Economics, 41 (4), 76-79.

McCurnin, D. M. (1999). Don't learn the hard way. Veterinary Economics, 40 (1), 78-83.

McDaniel, S., Campbell, T., & Seaburn, D. (1992). Family oriented primary care: A manual for medical providers. New York, NY: Springer-Verlag.

McWilliam, C., Brown, J. B., & Stewart, M. (2000). Breast cancer patients' experiences of patient-doctor communication: A working relationship. *Patient Education and Counseling*, 39 (2-3), 191-204.

Miller, W., Taylor, C. A., & West, J. C. (1980). Focused verses broad-spectrum behavior therapy for problem drinkers. *Journal of Consulting and Clinical Psychology*, 48 (5), 590-601.

Moore, G. (1997). A heartwarming lesson. Veterinary Economics, 38 (8), 32-34.

Mortowidlo, S. J., Dunnette, M. D., & Carter, G. W. (1990). An alternative selection procedure: The low fidelity simulation. *Journal of Applied Psychology*, 75, 640-647.

Nathanson, D. E., de Castro, D., Friend, H., & McMahon, M. (1997). Effectiveness of short-term dolphin-assisted therapy for children with severe disabilities. *Anthrozoos*, 10 (2/3), 90-97.

Natiello, P. (1998). *The relationship's the thing*. www.personcenteredtraining. org/peggysarticle1.htm. 2/19/01.

Odendaal, S. J., & Weyers, A. (1990). Human companion-animal relationships in the veterinary consulting room. *Journal of South Africa Veterinary Association*, 61 (1), 14-23.

Ong, L. M., de Haes, C. J. M., Hoos, A. M., & Lammes, F. B. (1995). Doctorpatient communication: A review of the literature. *Social Science Medicine*, 40 (7), 903-918.

Patterson, W. R. (1984). Empathy, warmth, and genuineness in psychotherapy: A review of reviews. *Psychotherapy: Theory, Research, Practice, Training, 21* (4), 431-438.

Pegorsch, D. S. (1998). The development of psychometric evaluation, and validation of a low-fidelity situational judgement inventory for personnel: An alternative approach to cognitive assessment. *Dissertation Abstracts International*, 58 (8-B), 4503.

Peterson, L. M. (1997). Surviving the heartbreak of choosing death for your pet: Your personal guide for dealing with euthanasia. Las Vegas, NV: Greentree.

Proulx, D. (1998). Animal-assisted therapy. Critical Care Nurse, 18 (2), 80-84.

- Quackenbush, J. E., & Glickman, L. (1984). Helping people adjust to the death of a pet. *Health and Social Work*, 9 (1), 42-47.
- Robinson, I., (1998, May). The changing roles of animals in society. Report from the 8th International Conference on Human-Animal Interactions. Prague Hilton Atrium Hotel Conference Centre, Prague, Czech Republic.
- Roenke, L., & Mulligan, S. (1998). The therapeutic value of the human-animal connection. Occupational Therapy in Health Care, 11 (2), 27-43.
- Rogers, C. R. (1980). A way of being / Carl R. Rogers. Boston, MA: Houghton Mifflin.
- Roter, D. (2000). The enduring and evolving nature of the patient-physician relationship. *Patient Education and Counseling*, 39, 5-15.
- Roter, D. L., Hall, J. A., Kern, D. E., Barker, L. R., Cole, K. A., & Roca, R. P. (1995). Improving physicians' interviewing skills and reducing patients' emotional distress: A randomized clinical trial. *Arch Intern Medicine*, 155, 1877-1884.
- Roter, D., Rosenbaum, J., de Negri, B., Renaud, D., DiPrete-Brown, L., & Hernandez, O. (1998). The effects of a continuing medical education programme in interpersonal communication skills on doctor practice and patient satisfaction in Trinidad and Tobago. *Medical Education*, 32 (2), 181-189.
- Russell, R. L. (1994). Preparing veterinary students with the interactive skills to effectively work with clients and staff. *Association of American Veterinary Colleges*, 21 (2). http://scholar.lib.vt.edu/ejournals/JVME/V21-2/russell.html. 1/2/01.
- Sanders, C. R. Biting the hand that heals you. http://www.psyeta.org/sa/ sa2.1/ sanders.html. 10/14/01.
- Seigel, M. (1995). Oklahoma aftermath: The power of pets. *Good Housekeeping*, 221 (5), 26.
- Serpell, D. & Luftman, J. (2000). Pet Loss/Grieving Summary Information. University of Pennsylvania, College of Veterinary Medicine.
- Smith, R. C. (1996). The patient's story: Integrating patient-doctor interviewing. Boston, MA: Little, Brown, and Company.

- Smith, R. C., & Hoppe, R. B. (1991). The patient's story: Integrating the patient and physician-centered approaches to interviewing. *Annals of Internal Medicine*, 115 (6), 470-478.
- Smith, R. C., Lyles, J. S., Mettler, J., Van Egeren, L. F., Stoffelmayr, B. E., Osborn, G. G., & Shebroe, V. (2000). A strategy for improving patient satisfaction by the intensive training of residents in psychosocial medicine: A controlled, randomized study. Academic Medicine, 70 (8), 729-732.
- Smith, R. C., Lyles, J. S., Mettler, J., Bertram, E., Stoffelmayr, E., Van Egeren, L. F., Marshall, A. A., Gardiner, J. C., Maduschke, K. M., Stanley, J. M., Osborn, G. G., Shebroe, V., & Greenbaum, R. B. (1998). *The effectiveness of intensive training for residents in interviewing.* www.acponline.org/journals/annals/15jan98/restrain. htm. 3/17/01.
- Smith, R. C., Marshall-Dorsey, A. A., Osborn, G. G., Shebroe, V., Lyles, J. S., Stoffelmayr, B. E., Van Egeren, L. F., Mettler, J., Maduschke, K., Stanley, J. M., & Gardiner, J. C. (2000). Evidence-based guidelines for teaching patient-centered interviewing. *Patient Education and Counseling*, 39 (10), 27-36.
- Snopek, R. W. (1996). Active listening techniques for the animal health professional. Veterinary Technician, January, 24-25.
- Stewart, M. F. (1999). Companion animal death: A practical and comprehensive guide for veterinary practice. Woburn, MA: Butterworth-Heinemann.
- Stutts, J. (1997). Bereavement and the human-animal bond. *Veterinary Technician*, 17 (6), 429-433.
  - Swift, B. (1997). The pet lover's triangle. Veterinary Economics, 38 (6), 50-55.
- Tilley, K. (1990). Family medicine-family therapy joint task force established. Family Therapy News, July/August, 1.
- Tinga, C. E., Adams, C. L., Bonnett, B. N., & Ribble, C. S. (2001). Survey of veterinary technical and professional skills in students and recent graduates of a veterinary college. *Journal of the American Veterinary Medical Association*, 219 (7), 924-931.
- Thompson, S. C., Nanni, C., & Schwankovsky, L. (1990). Patient-oriented interventions to improve communication in a medical office visit. *Health Psychology*, 9 (4), 390-404.

Tippen, K. A. (1999). Behavior modification: Best medicine in treating dogs' separation anxiety. Media Relations and Marketing. www.mediarelations.ksu.edu. 2/27/01.

Williams, S., Butler, C., & Sontag, M. (1999). Perceptions of fourth year veterinary students about the human-animal bond in veterinary practice and in veterinary college curricula. *Journal of the American Veterinary Medical Association*, 215 (10), 1428-1432.

Wilson, Liz. (2001). Demystifying veterinary medicine: Especially regarding avians. www.upatsix.com/liz/articles/demystifying.html. 3/20/01.

Valiquette, J. (1999). Animals as an agent for change in private practice psychotherapy. Unpublished master's thesis, Smith College, Northampton, MA.

Van Zuuren, F. J., de Groot, K. I., Mulder, N. L., & Muris, P. (1995). Coping with medical threat: An evaluation of the threatening medical situations inventory. Personality and Individual Differences, 21 (1), 21-31.

Van Zuuren, F. J., & Hanewald, G. J. F. P. (1993). Cognitive confrontation and avoidance in threatening medical situations: The development of an inventory. *Gedragstheragie*, 26 (1), 33-48.

### BIOGRAPHICAL SKETCH

Carole Joy Dias was born in Kittanning, Pennsylvania. She received a Bachelor of Science degree in psychology from Slippery Rock University of Pennsylvania in 1987 and a Master of Science Degree in Rehabilitation Counseling from the University of Florida in 1989.

After earning her Master's degree, she became a Rehabilitation Counselor for the state of Florida then went on to work specifically with individuals with brain injuries for a private rehabilitation agency in Gainesville, Florida. In 1999, she entered a training program at Gainesville Family Institute where she focused on marriage and family therapy using the Oppression Sensitive Approach. It was during this training that Joy realized the therapeutic value of having animals present during therapy sessions. In 2000, she was asked to join the staff at the University of Florida Veterinary Medical Teaching Hospital to develop a counseling program for clients who need support due to the illness or death of their pets and to teach a course to veterinary students on the human-animal bond. She is currently a licensed marriage and family therapist and the coordinator of CVM Companions at the UF College of Veterinary Medicine.

Joy has lived in Gainesville since 1987. She is married to Edward Dias and they live with several companion animals including dogs, cats, and parrots. She has a special interest in how the human-animal bond affects the emotional well-being of people and animals.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Larry C. Loesch, Chair

Professor of Counselor Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Silvia Echevarria-Doan

Associate Professor of Counselor Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Linda Shaw

Associate Professor of Rehabilitation

Counseling

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Ronald Spitznagel / / /
Associate Professor of Rehabilitation

Counseling

This dissertation was submitted to the Graduate Faculty of the College of Education and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

August 2002

Dean College of Education

Dean, Graduate School